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ABSTRACT

This directory is a compilation of Massachusetts' programs for gifted and talented students reported by survey in 1984. Programs are organized alphabetically by title within four major topic areas: local school programs, academic regional programs, vocational-technical regional programs, and a special project at Southeastern Massachusetts University that serves area high schools. Information reported for programs includes contact person, grades served, curriculum, program type, instructional model (including B. Bloom's taxonomy, structure of the intellect, enrichment triad, revolving door, and future problem solving bowl), time, staff, and funding source. Also included is a brief program summary. Appendixes provide (1) an analysis of trends in reported programs, (2) a description of inservice education through the Commonwealth Inservice Institute, and (3) a breakdown of Education Block Grant funds by school district. An index provides access to program summaries by school district and grade level. (CL)

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SCHOOL PROGRAMS FOR GIFTED AND TALENTED STUDENTS

Spring 1985

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INTRODUCTION

WHO ARE THE GIFTED AND TALENTED? The U.S. Office of Education developed the following definition, which has been adopted by the Massachusetts Board of Education. The definition suggests a comprehensive assessment of the potential, achievements, and abilities of this population.

> Gifted and talented children and youth are those identified by professionals and other qualified individuals as having outstanding abilities and who are capable of high performance. These are children and youth whose abilities, talents, and potential require qualitatively differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

DIRECTIONS FOR LOCAL SCHOOL DISTRICTS

In 1978, the Board of Education adopted a position statement entitled **The Education of the Gifted and Talented.** In the position statement, the Board of Education encouraged school districts to meet the needs of gifted and talented students regardless of their race, religion, sex, or national origin. The Board urged local school systems to consider the following directions:

> Stimulate gifted and talented children and youth to develop into creative, capable, productive, and compassionate human beings who have a commitment to personal excellence and a commitment of service to a pluralistic society;
>
> Identify at every grade level and in every public school those students whose abilities, talents, and potential for accomplishment are so outstanding that they require special provisions to meet their educational needs, regardless of linguistic, cultural, ethnic, or socioeconomic backgrounds;
>
> Initiate, expand, and improve varied programs that will allow gifted and talented children to realize their fullest potentialities;
>
> Identify volunteer resources, including teachers, students, parents, and community members who possess the qualities of intellectual, artistic and athletic excellence, creative ability, and empathy for the gifted and talented, and create opportunities for them to work with such students;
>
> Provide professional development opportunities for all those involved in the education of the gifted and talented in order for educators to understand the unique requirements of these children, and how to deal with these educational needs.

REPORTED SCHOOL PROGRAMS

This resource guide is a compilation of programs for gifted and talented students that were reported by survey to the Massachusetts Department of Education's Office for Gifted and Talented in the Fall, 1984. The Department's survey was designed to elicit maximum information about these programs and the educational philosophies that they represent. Information was requested about grades served, the number of students participating, the curriculum, instructional models, hours per week that students spend in the program, and funding sources.

Several important points should be made about the data that is reported for each school district:
(1) Programs for gifted and talented meet locally developed criteria. School districts are encouraged to make these judgments independently. No formal criteria is provided beyond the guidelines for student identification contained in the Board of Education's position statement.
(2) Programs and practices are presented to indicate the variety of options and approaches to the education of the gifted and talented that are found in school districts in the Commonwealth. Inclusion in this resource guide does not imply endorsement by the Department of Education. Except for editing for conciseness, consistency, and clarity, program descriptions appear as they were reported.

NOTE TO OUR READERS

In times of reduced resources, programs for gifted and talented students are especially vulnerable to budget reductions. The Department of Education encourages school districts to make use of community resources, mentors, and inservice education in serving gifted and talented students. Funds for inservice education are available through the Commonwealth Inservice Institute (See APPENDIX B).

DEFINITIONS

A. Terminology Used in Describing Programs for Gifted and Talented Students

Advanced Placement Program. College-level courses offered at the senior high school for which students can receive college credit.

Acceleration. Programs that provide for rapid progress through sequentially structured content. Examples of acceleration are: (1) early entrance, (2) skipping grades, (3) credit by examination, (4) nongraded classes, (5) early graduation, and (6) advanced placement classes.

Artists-in-Residence. A program that integrates working artists into the everyday life of a school so that students can observe serious art making in progress and participate in that process.

Community Resources. The human and material resources including cultural institutions, business and industry, and all types of volunteer organizations.

Compacting of Curriculum. Students identified for gifted programs are often functioning far above grade level. In order to find time for a student to participate in the gifted program, (s)he is tested to determine areas of strength in the basic curriculum that can be "compacted" or covered in a minimum of time.

Convergent Thinking. Convergent thinking is oriented toward the known or "right" solution to a problem. This type of thinking is conventional and traditional and is what is traditionally measured on tests of intellectual ability.

Differentiated Programming. Programs that are qualitatively different from that provided in the regular classroom.

Divergent Thinking. Divergent thinking is the ability to produce new forms, to find new meanings by putting together elements that are usually thought of as dissimilar. Divergent thinking is highly creative thinking.

Enrichment. Learning experiences which are intended to extend, supplement, and/or deepen understandings within specific content areas.

Heterogeneous Grouping. Gifted and talented children remain in the regular classroom for instruction with their chronological peers.

Homogeneous Grouping. Gifted and talented children are grouped together in a separate classroom for accelerated learning or enrichment experiences.

International Baccalaureate Diploma Program. A rigorous college-level curriculum offered to Massachusetts school districts that have affiliation with the International Baccalaureate Office of North America, New York, New York.

Itinerant Teacher. A teacher who travels among two or more schools to work with children. Transportation of materials and equipment may be involved.

Johns Hopkins Talent Search. Accelerated residential summer programs offered to seventh grade students who have scored at the 97th percentile in nationally normed tests, and scored well on subsequent SATs.

Mentor. A qualified adult who works with a student in a particular area of interest. A mentor may provide an internship or an apprenticeship.

Modified or Adapted Models. Many school systems have modified or adapted one or more of models (listed below) in order to more appropriately meet the needs of gifted students and/or teachers in the system. Some schools have developed programs that combine features of several of the models and some have developed unique programs.

Pull-out Program. Children are taken out of classrooms for a specified period in order to work together on special assignments or activities which are not part of the regular program.

Resource Room. A separate room or area containing a variety of learning materials and staffed by a resource room teacher. Children visit the resource room for special work assignments or group experiences.

B. Glossary of Instructional Models

Benjamin Bloom's **Taxonomy (Classification System).** In this taxonomy, the hierarchy of thinking skills used in the learning process is organized into six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. In the education of gifted children, emphasis is placed on the higher level thinking skills of analysis, synthesis, and evaluation, building on a solid base of knowledge, comprehension, and application. Teachers find that understanding these levels of thinking is a great help in writing better classroom questions and in developing curriculum focused on abstract concepts and critical and creative thinking.

J.P. Guildford's **Structure of Intellect Model (SOI).** This model is a classification system of 120 intellectual abilities. The model is a three-dimensional cube that demonstrates the interconnectedness of these abilities. This model can be used to identify students' strengths and weaknesses and to develop a more individualized curriculum which builds on a student's talents while correcting deficiencies.

Joseph Renzulli's **Enrichment Triad Model.** This model is made up of three sets of activities:
Type I activities are exploratory and are designed to introduce students to topics they may wish to explore in greater depth.
Type II activities are training exercises which teach students research techniques and methods, and develop higher level thinking skills.
Type III activities are those in which the student becomes an investigator of a real problem. The success of this type of activity depends on the interest and task commitment of the individual student.

Joseph Renzulli's **Revolving Door Model.** In this model, a talent pool of up to 35 percent of the students in a school is identified as having the characteristics of high ability, creativity, and task commitment. When a student in the talent pool is in need of significant amounts of time with the teacher of gifted and talented in order to develop a project in which (s)he is highly interested, (s)he is permitted to "revolve" into the program for the time span of the project. Ideally, the regular curriculum of this student is "compacted" in order for time to be made available for the project.

Future Problem Solving Bowl. A year-long curriculum and program of state and national competitions whose goals are to develop: skills in creative problem solving; teamwork and cooperation; and international perspective.

ACTON

Academically Talented Program **Started:** 1979

Luther Conant
Douglas
Gates
McCarthy-Towne

Contact: Whitney Davis, Luther Conant School
Taylor Road, Acton, MA 01720
(617) 264-4700
Grade(s) served: K-3 = enrichment, 56 students; 4-6 = pull-out, 76 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment: during school, pull-out, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/week, 6-week enrichment cycles
2½ hours/week, pull-out
Staff: 2 part-time; 10 mentors
Funding: local

Children involved in the pull-out component are bused from all four participating schools to work on projects in a resource room. Students are identified through testing and the Renzulli scale.

The enrichment component focuses on social studies units. Much of the work is done independently, in project form. The teacher travels to all four schools and works with small, teacher-selected groups.

AGAWAM

Project Specific Enrichment Education (SEE) **Started:** 1981

Clifford M. Granger
Robinson Park
Benjamin J. Phelps
James Clark School
Agawam Middle School

Contact: William J. Miller, Benjamin J. Phelps School
689 Main Street, Agawam, MA 01001
(413) 789-1400, ext. 400
Grade(s) served: K-6, 79 students
Curriculum: science, language arts, social studies
Type: enrichment: during/after school, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 2 hours/week = primary level; 4 hours/week = others
Staff: 1 full-time/itinerant; 2 part-time; mentors
Funding: local, block grant

SEE's central concern is the development of the whole child. The program is based on the concept that, along with capability, there should be a sense of responsibility and responsiveness to the needs of others. SEE instructors and administrators use Renzulli's Enrichment Triad as a workable model around which to develop curriculum.

The curriculum is interdisciplinary; it covers areas in science such as botany and chronobiology, discussions of children's literature, psychology, and "Think Tank," a simulation to promote creative thinking. This year, SEE has 13 Future Problem-Solving Teams.

Often, mentors help students deal more effectively with independent study areas, e.g., fashion design, computer programming. Addressing the affective needs of gifted students is an integral part of the program. A series of evening meetings are conducted at which students, parents, a home/school adjustment counselor, and the SEE teacher talk about personal development for the gifted child.

The Middle School program has centered around research about many different countries. The program is further enriched by invited speakers who address the students about the various aspects of specific countries, and by appropriate field trips.

ANDOVER

Gifted and Talented Program **Started:** 1977

Bancroft Elementary
Henry C. Sanborn Elementary
South Elementary
West Elementary
Doherty Junior High
Andover West Junior High

Contact: Janis R. Baron, Andover Public Schools
Ann's Lane, Andover, MA 01810
(617) 475-2992 or 470-1700

Grade(s) served: 4-6 & 7-9, 190 students

Curriculum: computers, science, mathematics, language arts, social studies, music, art

Type: enrichment: school facilities, community resources, speakers

Model(s): Renzulli's Enrichment Triad; Bloom's Taxonomy

Time: 3 days/month = intermediate; 4 days/month = junior high

Staff: 1 part-time; 9 teachers function as program leaders in addition to classroom duties

Funding: local

NOTE: Special transportation required for this program.

Andover's program meets the needs of many types of students:

Those who have extremely high general academic ability are placed in either the **Frontiers of Science, World of Water, Archaeology, Creativity,** or **Leadership** programs. Andover has worked closely with the Museum of Science, Museum of

Fine Arts, New England Aquarium, and others to develop these programs that challenge students to use higher level thinking skills in solving complex problems. Program leaders conduct numerous seminars with the children.

Students with specific academic aptitude are offered programs in creative writing, newswriting, computers, and social studies. Those who excel in the visual and performing arts may be placed in the art, music, or drama programs, for which there are no academic criteria.

Junior high school students participate in small group shadowing, mentor, and/or future problem-solving experiences. Students in all programs are required to sign contracts and to maintain anecdotal logs. A progress report goes home three times per year. The program has adjusted to budgetary restrictions but is proud to have strong administrative and community support.

Gifted and Talented Enrichment Program **Started:** Not Noted
West Junior High School

Contact: Brenda M. Doherty, West Junior High School
Shawsheen Road, Andover, MA 01810
(617) 470-1700, ext. 297
Grade(s) served: 7-9, 48 students
Curriculum: computers, language arts, thinking skills
Type: enrichment, acceleration: during school, homogeneous, independent study
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/week; 40 weeks/year
Staff: full-time; mentors
Funding: local

The 7th grade program focuses on the development of thinking skills, experience with appropriate computer software, and the preparation of orientation materials for the 6th grade students coming to West Junior High School the following year.

The 8th grade program continues the exploration of analytical thinking skills and allows for involvement in problem-solving competitions.

The 9th grade program is an integral part of an accelerated English class. Students are expected to complete the designated curriculum and pursue selected enrichment options.

ARLINGTON

Elementary Academically Talented Program (AT) **Started:** 1980

John A. Bishop
Brackett
Cyrus E. Dallin
Hardy
Peirce
Thompson
M. Norcross Stratton

Contact: Hilary Hopkins, Stratton School
180 Mountain Avenue, Arlington, MA 02174
(617) 646-1000, ext. 480
Grade(s) served: 4-6, 144 students
Curriculum: science, mathematics, language arts, social studies, art, thinking strategies
Type: enrichment: during school, homogeneous
Model(s): locally designed
Time: 1½ hours/week
Staff: 1 full-time; 2 part-time
Funding: local

Arlington's AT participants at each school meet in one cross-graded group. Four units of study are offered during the year. The first unit, required of all AT students, offers a series of thinking strategies that encourage creativity and rigor. Students, together with their parents, receive an evaluation following this unit and decide whether to continue with the program.

Following the Christmas vacation, three additional 6-week units are offered, two of which pose and attempt to answer questions in content areas. Adults in various professions visit the classes during the third unit. Students are asked to sign up for at least two of the three units.

An important underlying aim of the classes is to provide an atmosphere in which it is "safe" for AT students to find work very difficult, or even to fail at first. AT staff encourage students to understand that they do not have to be perfect, and that learning actually begins with something unknown rather than known. The AT teacher helps students learn how to do things that may be unfamiliar or difficult at first, rather than testing students to see if they can do something. Program time is too short to generate extensive products. Instead, the focus is on the moment of learning in the class, in discussion, in activities, and in private discovery. Although a modest amount of homework is required and its completion is important, most work is done during the regular AT class meeting. Outreach activities include the recruiting of "adjunct participant" students for particular units. Over 350 materials are available for loan to teachers, parents, and students.

Junior High Gifted and Academically Talented **Started:** 1980
Ottoson Junior High Gibbs Junior High

Contact: Nancy Cresco
63 Acton Street, Arlington, MA 02174
(617) 646-1000
Grade(s) served: 7-8, 100+ students
Curriculum: science, mathematics, language arts, social studies, art
Type: enrichment: during school, after-school, homogeneous, heterogeneous, pull-out, independent study, resource room, school facilities, community resources
Time: 1-2 hours/week, 1-2 days/week, 30 weeks/year

Staff: 2 full-time; 1 student intern; 4 cultural institutions (e.g., MFA; Museum of our National Heritage; Arlington Cablesystem)
Funding: local, block grant

The program has various components designed to meet the needs of students with diverse interests, for example, a particular academic aptitude, or excellence in the visual arts.

Both small-group and class activities promote critical thinking skills and encourage creativity. With the cooperation of community agencies, such as museums, historical societies, cable television studios and social action groups, students have undertaken real-life projects. Independent studies are related to the academic disciplines, providing the opportunity for students to adapt their learning experiences to the regular classroom.

The goals of the program are to meet the individual needs of gifted and talented students, to enrich existing programs, and to make students aware of their potential. To accomplish this, the program provides a writing curriculum within which students publish a literary magazine; exposure to **Project Adventure** skills, using field trips to implement these skills; exposure to a **Great Books** session; and an opportunity for students to produce an art mural for the school cafetorium. Through this program, the enrichment staff has successfully introduced symmetry and logic enrichment into the math curriculum; assisted teachers in the course "Facing History and Ourselves," and provided video taping instruction.

ASHLAND

Academically Creative & Talented (ACT) **Started:** 1984
Henry E. Warren Elementary David Mindess Middle

Contact: Ilene Heinke
90 Concord Street, Ashland, MA 01721
(617) 881-2126
Grade(s) served: 2-5, 44 Students
Curriculum: interdisciplinary
Type: enrichment, acceleration: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad; many models combined
Time: 2-4 hours/week
Staff: 1 full-time; 15 mentors
Funding: local

ACT is designed to provide students with an atmosphere of intellectual freedom that nurtures their curiosity, creativity and understanding. Approximately 10 percent of the participants are involved in the ACT resource room; another 10 percent are involved in **Junior Great Books** and other enrichment pro-

grams. The curriculum for the resource room is designed to encourage students to make connections among fields of study. Four learning stations--**Cultural Perspectives, Human Expressions, Patterns in Nature,** and **The Exploring Mind**--are designed to include all of the disciplines. Each station provides exploratory activities and sequenced, self-paced minicourses. The exploratory activities are designed to interest and expose children to new ideas and topics, while the units direct students to pursue knowledge and interests in more depth.

Students keep contracts and journals to record their discoveries, ideas, work, and thoughts. They meet in groups, before and after they work at learning stations, to discuss and analyze the connections which they have discovered among the disciplines. The **ACT** coordinator schedules trips and invites guest speakers to share students' interests. When students become motivated to pursue a particular question, interest, problem or concern, they structure their own research investigation.

A fifth learning station, **The Search for Connections,** is filled with resources and ideas to help students begin a research investigation. Students are encouraged to seek out the information and resources they need to investigate their questions. **ACT** is being expanded over the next two years to include grades K-7.

ATTLEBORO

Academically Talented Program **Started:** 1984

Studley School
Joseph Finberg
Hyman Fine Elementary
Bliss School
Willett
Hill Roberts Elementary

Contact: Nancy Sprague, Willett School
Watson Avenue, Attleboro, MA 02703
(617) 222-0286

Grade(s) served: 4-5, self-contained class = 24 students, pull-out component = approximately 75 students

Curriculum: computers, science, mathematics, language arts

Type: enrichment, acceleration: during school, homogeneous

Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy, Guilford's SOI

Time: 6 hours/day, self-contained class; proposed pull-out program, 3 days/month

Staff: 1 full-time; 1 itinerant; 5+ mentors

Funding: federal Chapter II

Attleboro's program seeks to develop research skills and creative problem-solving techniques and to learn effective time management skills and cooperation in team-learning situations.

The program consists of two components. The first component is a self-contained class of 24 students; they represent approximately 3 percent of the school district's population in grades 4 and 5. Participants are bused daily to a centrally

located school. Curriculum content is taught through the use of a variety of research and problem-solving techniques, rather than standard texts. Field trips and guest speakers enhance the learning climate.

The second component is a pull-out program held in each elementary school. An additional 12 percent of the student population (approximately 75 students) is served through this plan. Beginning in January 1985, students received instruction two full days plus two half days each month. Classroom teachers worked with the pull-out teacher to accomplish curriculum compacting.

BARNSTABLE

Barnstable's GATEWAY **Started:** 1980

West Barnstable Elementary
Centerville Elementary
Cotuit Elementary
Hyannis Elementary
Hyannis West Elementary
Marstons Mills Elementary
Osterville ELementary
Middle School Grade 6
Barnstable Middle School
Barnstable High

Contact: Roseli Weiss, Barnstable High
744 W. Main Street, Hyannis, MA 02601
(617) 775-2600
Grade(s) served: K-12
Curriculum: language arts, problem-solving strategies
Type: enrichment: during school, after school, homogeneous, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Problem-Solving Strategies Creativity-Torrance Future Problem Solving
Time: 1 day/week
Staff: 7 full-time; 1 artist-in-residence; mentors
Funding: local

Barnstable's **GATEWAY** offers a variety of activities. In grades K-3, a resource specialist is available in each school for consultation and to share resource materials with students. In grades 4-6, formal identification exists and students meet with the resource specialist to learn problem-solving strategies using a variety of materials. Classroom teachers are provided with materials and support. **Junior Great Books** groups and **Future Problem Solving** are also offered to both grades 4-6 and middle school participants.

In the middle and high schools, consultation and resources are provided to the staff. At the high school, **Independent Study** and a **Corporation** (all advanced level courses) also are offered to students. Each year, two participants attend the Congressional Seminar in Washington, D.C.

BEDFORD

Program to Recognize and Enrich Potential (PREP) **Started:** 1980
Lt. Eleazar Davis Lt. Job Lane

Contact: Judy Wood, Davis School
Davis Road, Bedford, MA 01730
(617) 275-7606 or 275-6804
Grade(s) served: 1-5; grades 4-5, 31 students
Curriculum: computers, science, language arts, social studies
Type: enrichment: during school, resource room, pull-out
Model(s): combination of several models
Time: 2 hours/week, 2 days/week
Staff: 2 full-time
Funding: local

Students in grades 1-3 who exhibit outstanding talents and abilities participate in eight- to ten-week enrichment units. Another feature for 1st and 2nd graders is a series of 30-minute lessons conducted in the regular classroom, which promote the development of creative thinking skills for the entire class.

Students in grades 4-5 meet in a resource room to study two units during the school year. Topics offered include whales, creative dramatics, chemistry, video production, the Museum of Fine Arts study, unexplained mysteries, and the Middle Ages. The focus of these sessions is on the development of critical thinking skills and creativity. Museums, speakers, films, field trips, and interviews provide the catalyst to generate curiosity and interest.

BEVERLY

Elementary Enrichment Center **Started:** 1976
Abraham Edwards
Centerville
Hannah Elementary
North Beverly Elementary
Ayers/Royal Side School
Cove
McKay
Thomas Beadle Jr. School

Contact: Judith Alexander, Principal
131 McKay Street, Beverly, MA 01915
(617) 922-2867
Grade(s) served: 3-5, 60 students
Curriculum: computers, science, language arts, social studies, music, art, logic
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad; our own
Time: 1 day/week

Staff: 2 full-time; 1 artist-in-residence; cultural institutions (Museum of Science, MFA, Hammond Castle Museum); specialist (e.g.: science)
Funding: local

The **Elementary Enrichment Center,** designed to serve about 60 academically talented students from throughout Beverly, is for students who will benefit from working with others of comparable ability in all areas of study, in an atmosphere that demands excellence. A multifaceted approach to screening includes teacher/principal recommendations, achievement test scores, intelligence test scores, and a comparative rating scale of behavioral characteristics. A professional admissions committee evaluates candidates' qualifications and invites selected students to attend the program.

Techniques of research, rudiments of logic, and introduction to the scientific method, as well as enrichment in literature and the arts, form the basis of the program. Acceleration in specific content areas is not a goal.

BOLTON

Accelerated Math & Literary Skills **Started:** 1983
Emerson

Contact: Jacqueline Scheibel or Donna Cox
692 Main Street, Bolton, MA 01740
(617) 779-2821
Grade(s) served: 1-6, approximately 90 students = literary program; 5-6, 20-25 students = math program
Curriculum: mathematics, language arts
Type: enrichment (literary), acceleration (math): homogeneous
Model(s): Renzulli's Enrichment Triad
Time: 1+ hours/week, 8-10 weeks/year = literary program; 5 hours/week, 40 weeks/year = math program
Staff: full-time
Funding: local

Junior Great Book and **Writer-In-Residence** sessions are part of the **Literary Skills** program. Additional information is available from either contact person.

BOSTON

Advanced Work Classes/Academically Talented Student Program (AWC/ATS) **Started:** N/A

Farragut
David A. Ellis
Joseph Lee
Charles H. Taylor
Mather
Richard J. Murphy
Paul A. Dever
Josiah Quincy
Manassah E. Bradley
James W. Hennigan
Guild School
Mary E. Curley Middle
Washington Irving Middle
Frank V. Thompson Middle
James P. Timilty Middle
Joseph H. Barnes Middle
Martin Luther King, Jr. Middle
Charles E. Mackey
Thomas A. Edison Junior High
Oliver Wendell Holmes Junior
John W. McCormack

*Both the Hennigan and the Mackey schools have advanced bilingual classes as well

Contact: Joanne McManus
26 Court Street, Boston, MA 02108
(617) 726-6200, ext. 5467

Grade(s) served: 4-6, 1175 students

Curriculum: computers, science, mathematics, language arts, social studies

Type: during school, homogeneous

Model(s): Renzulli's Enrichment Triad; interdisciplinary teaching units that stress Bloom's higher order thinking skills

Staff: full-time; cultural institutions (Cultural Collaborative agencies)

Funding: local

The **AWC/ATS** program responds to the unique needs of students whose abilities, talents, and potential for accomplishment are so outstanding that they require a special, differentiated learning environment. Children are identified in grade 3 for participation in this program. Once selected, these students are sent to a school with advanced work programs. The programs provide activities and opportunities that develop self-direction as it relates to independent study and individualized instruction, and self-expression as it relates to fostering divergent thinking.

BRAINTREE

Computer Literacy (K-1) & **Great Books** (2-3) **Started:** 1981

Archie T. Morrison
Highlands
Liberty
Donald Ross
Lakeside

Contact: H. Kenneth Dooley
Washington Street, Braintree, MA 02184
(617) 848-4000
Grade(s) served: K-1, 500 students; 2-3, 50 students
Curriculum: computers, language arts
Type: enrichment
Time: 1 day/week, 6 weeks/year
Staff: 2 part-time
Funding: local

In the **Computer Literacy** program, children learn to program in Logo, giving them the ability to self-direct the computer. An elementary mathematics/computer specialist visits every kindergarten and 1st grade classroom six times a year on a regular schedule. She works with each class on computer awareness activities and Logo commands; every child has some hands-on experience with the computer. The "Instant" program from the Logo Utilities disk is used with the children to simplify programming instructions. Materials are left with regular class teachers for follow-up activities and preparation for the next class.

In the **Great Books** program, a reading specialist visits the elementary schools once a week to conduct a discussion period with above average readers. The materials of the program are used in sequence, and students are encouraged to formulate challenging and abstract questions.

Hollis Center Program **Started:** 1978
Hollis Center

Contact: Therese M. McKillop
128 Town Street, Braintree, MA 02184
(617) 848-4000
Grade(s) served: 4-5, 97 students
Curriculum: computers, science, mathematics, language arts, social studies, foreign language (introduction)
Type: enrichment: during school; pull-out for 1 day a week
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 1 full-time; 1 part-time; many mentors
Funding: local

Special enriched curricula in language arts and mathematics are taught by reading and mathematics specialists. Research skills, reading, writing, communication via media and the arts, creative problem solving, reasoning and logic are some of the instructional areas of the program. Students receive special instruction in communicating their own ideas by means of various media. Teachers conduct classroom projects to develop self-image and to assist in interpersonal relationships; they also serve as liaisons for the student with the home school. Various other resource people are recruited from the community, and occasional field trips are taken to enrich the students' direct experiences.

Students are transported to the **Center** by their parents. Homework is given by the teachers on the day the students attend; they are excused from home school homework that would have been due on the day they attend **Hollis Center.** Students who participate in the program are released from regular homework assignments one day per week.

Students do not receive report card marks for their work in the program. They report on their activities by means of a letter written at the end of each day they attend the Center. One copy of this letter remains at the Center. Satisfactory completion of work is acknowledged by a certificate awarded at the completion of the year for each year the student has attended the Center. Principals, teachers, and parents are welcome to visit.

Grade 6 G/T **Started:** 1980
East Middle School South Middle School

Contact: Therese M. McKillop, Hollis Center
128 Town Street, Braintree, MA 02184
(617) 848-4000
Grade(s) served: 6, 45 students
Curriculum: computers, science, mathematics, language arts, social studies, Latin
Type: enrichment, acceleration: during school, team teaching
Time: 5 days/week
Staff: 5 full-time; 2 part-time
Funding: local

The 6th grade program is designed to: emphasize the academics through departmentalization; provide opportunities for enrichment and exploration, particularly in art and music centers; better utilize community and professional resource people; and use subject-matter specialists as in-house resource people.

Participants take units in English, social studies, mathematics, science, composition, and the first half of Latin I. They are in homeroom and take electives with all the other 6th graders. Program requirements are: English, mathematics, social studies, science, art (twice per cycle), music (twice per cycle), physical education (twice per cycle), composition and Latin, Part I (both three times per cycle). Electives offered are chorus, band, and orchestra.

Advanced Secondary **Started:** 1967
Braintree High

Contact: H. Kenneth Dooley
Washington Street, Braintree, MA 02184
(617) 848-4000
Grade(s) served: 7-12 inclusive, 270 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, foreign language
Type: enrichment, acceleration: during school, homogeneous, independent study

Model(s): Pre- International Baccalaureate (IB) & advanced placement (AP) classes as well as IB & AP prescribed courses. AP program involves a large number of students
Time: 5 days/week
Staff: 1 or more teachers in each subject matter area for each course offered--as many as 20 middle school and 20 high school faculty participate
Funding: local

Students are selected for the program by a team of 6th grade teachers for 7th grade **Levels 1-4** in English, social studies, mathematics and science. Selection is based upon the students' interests and abilities. The Level 1 program in each discipline is specially designed to lead to **AP** courses in grades 11 and 12. Students in Level 2 courses who display interest and ability in grades 7-10 will be placed in a Level 1 course upon the recommendation of the teacher. The study of French, Spanish and Latin in 8th grade leads to AP courses in French and/or Spanish. The study of computer science in grades 10 and 11 leads to an AP course in computer science. The **International Baccalaureate Diploma Program** is offered to 11th and 12th grade students who have performed statisfactorily in the prerequisite courses at Braintree High school.

BREWSTER

Brewster Elementary Enrichment Program (BEEP) **Started:** 1979
Brewster Elementary - Nauset Union 54

Contact: Richard Bridgwood
Underpass Road-Box S, Brewster, MA 02631
(617) 896-5933
Grade(s) served: 3, 6 students & 4, 14 students
Curriculum: computers, mathematics, language arts, social studies, music, art, creative thinking & problem solving
Type: enrichment: during school, homogeneous, team teaching
Time: 1.3 hours/week, 2 days/week, 30 weeks/year

BEEP was initiated for gifted children in an attempt to meet the needs of a wide range of students. In the Brewster Elementary School, there is little objective material by which to assess students' abilities; consequently, **BEEP** balances testing with subjective opinions formed through experience and common sense gleaned in conducting the program. Each year admissions criteria are reevaluated in order to be as honest and as fair as possible to every child. At present, the identification process begins with consideration of each child's achievement as measured by the Iowa Test of Basic Skills and the child's progress reports. Children nominated also must be recognized as high achievers by their homeroom teachers.

Children in grade 3 enter the program midyear and continue in grade 4. For more detailed information, please call the contact person noted above.

BROCKTON

Elementary Gifted Program **Started:** 1943
Dr. W. Arnone Community School

Contact: Betty T. Gilson
175 Warren Avenue, Brockton, MA 02401
(617) 580-7241
Grade(s) served: 4-6, 82 students
Curriculum: computers, mathematics, language arts, social studies, foreign language, research skills
Type: enrichment, acceleration: during school, homogeneous, independent study, full time
Time: 5 hours/day, 5 days/week
Staff: 4 full-time; 2 in Chapter 636 office, multicultural coordinator and secretary
Funding: Chapter 636

Brockton's **Elementary Gifted Program** emphasizes independence through research skills. Both enrichment and acceleration are used depending upon the subject areas and the needs of the students. French and Spanish are introduced in grade 4 and pupils choose one language with which to continue.

Concern for society is stressed through special projects, including work with special needs students in the building. One goal of the program is to have one-third of each class come from minority groups. The school's multicultural curriculum is popular with students, and there is strong participation.

AII Program **Started:** 1966
West Junior High

Contact: Eugene Franciosi
271 West Street, Brockton, MA 02401
(617) 580-7381
Grade(s) served: 7-8, 60 students
Curriculum: computer technology, science, mathematics, language arts, social studies, humanities, architecture, psychology
Type: enrichment, acceleration: during school, homogeneous, independent study, team teaching, full academic self-contained program
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy, Guilford's SOI
Time: full schedule: out of program only for gym & other specials
Staff: 3 full-time; 2 part-time; 1 itinerant; cultural institution ((Brockton Art Museum); 1 mentor
Funding: local, Chapter 636

The **AII Program** for the academically talented students in Brockton provides an experiential instructional framework for gifted students that insures continuity and articulation between elementary (grades 4-6) and secondary (grades 7,8) levels in both academic enrichment and acceleration activities. Special consideration is given to combating minority isolation.

Self-motivation is stimulated so that independent learning may be achieved, specific aptitudes strengthened, and scope of interests broadened; basic skills are stressed. This team-teaching situation features flexible scheduling.

BROOKLINE

Gifted and Talented Program **Started:** 1979

Edith C. Baker
Edward Devotion
Michael Driscoll
Heath
Lawrence
William H. Lincoln
Pierce
John D. Runkle

Contact: Bunny Meyer, Susan Kaplan, Barbara Libby
Brookline Public Schools, Town Hall, Brookline, MA 02146
(617) 734-1111, ext. 121
Grade(s) served: K-8, 100 students
Curriculum: multidisciplinary
Type: enrichment: during school, independent study, team teaching
Model(s): Renzulli's Enrichment Triad, Future Problem Solving
Time: 1 hour/week
Staff: 1 full-time; 2 part-time
Funding: local, Commonwealth Inservice Grant

Brookline's program supports teachers in their goal to maximize the creative and intellectual potential of their students. Workshops and materials dealing with those strategies found to be effective in extending the thinking of children are available both townwide and in individual schools. In addition, resource teachers talk with parents about issues connected with their children's growth, and work with small groups of children engaged in independent study.

School-based gifted and talented resource teams comprised of the principal, guidance counselor, and teachers meet with the gifted and talented coordinators to decide how to best mesh the schools' needs with the system's resources. A townwide parent/teacher advisory committee examines those strategies that will maximize the potential of all children.

BURLINGTON

BEAM **Started:** 1950

Fox Hill
Memorial
Wildwood
Pine Glen Elementary
Marshall Simonds Middle

Contact: Gloria Lombard, Fox Hill School
Fox Hill Road, Burlington, MA 01803
(617) 273-1870
Grade(s) served: 4-8, 90 students
Curriculum: computers, science, language arts
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 1 day/week
Staff: 2 full-time
Funding: local

The **BEAM** program emphasizes academic curricula, including skills in computer science, analysis and evaluation, design and research, problem solving, and creative and effective communications. Parents of students assist the program by identifying resources, sharing expertise, and publishing a newsletter of **BEAM** information. The program also serves as a resource for parents and the entire school population by making materials available, and organizing informational meetings and displays.

CAMBRIDGE

Intensive Studies Program (ISP) **Started:** 1978

Agassiz
M.E. Fitzgerald
Fletcher
Haggerty
Charles G. Harrington
King
Longfellow
Morse
Peabody
Robert F. Kennedy
John M. Tobin
Graham/Parks New Alternative

Contact: Margaret Carroll, Longfellow School
359 Broadway, Cambridge, MA 02139
(617) 498-9264
Grade(s) served: 6-8, 147 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, heterogeneous; the students are in mixed homerooms, but take content subjects as a group; gym, lunch, some art and music are taken with entire school population
Time: all day, all week
Funding: local

ISP is a citywide, multiethnic program that emphasizes the academics for students. Participants are selected from across the city on the basis of demonstrated achievement and motivation. Students share homeroom activities with other Longfellow students but take content subjects in a homogeneous group.

The goals of ISP are: to provide a challenging academic curriculum for students; to develop student responsibility, initiative, and decision making; and to encourage students to pursue individual interests. The academic focus of the program is on three areas:

Accelerated Basic Skills Curriculum: offered in English, mathematics, and social studies; stresses above-grade level materials.

Enrichment Program: involves extensive use of learning opportunities available in the community, including an ongoing program at the Museum of Science.

Tutorial/Mentor Program: allows a student to work closely with a specialist or mentor on a project of mutual interest.

CANTON

Program for Academic and Creative Enrichment (PACE) **Started:** 1978

Lt. Peter M. Hansen
John F. Kennedy
Wm. H. Galvin Middle
Dean S. Luce

Contact: William M. Fay
55 Pecunit Street, Canton, MA 02021
(617) 828-7250
Grade(s) served: 3-8, 80 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, homogeneous,independent study
Time: 1.5-2 hours/week
Staff: 1 itinerant
Funding: local, block grant

In the PACE program, talented students can develop their intellectual, creative thinking and problem-solving abilities through challenging instructional activities. It provides an environment in which students become more independent and effective as learners in all learning situations. The program also helps students develop stronger self-concepts by providing small-group interaction with other talented students. The PACE coordinator provides classroom teachers with materials and/or support for use in expanding classroom activities.

CHELMSFORD

Enrichment Program of Chelmsford (EPOCH) **Started:** 1982

South Row
Charles D. Harrington
Col. Moses Parker School
Westlands Elementary
Byam School

Contact: June Gould
75 Graniteville Road, N. Chelmsford, MA 01863
(617) 251-4981
Grade(s) served: intermediate, 110 students; Math Strand, 90 students
Curriculum: mathematics, language arts, interdisciplinary
Type: enrichment: during school & pull-out program
Model(s): Renzulli's Enrichment Triad modified, Renzulli's Revolving Door modified
Time: 1.5 hours/week
Staff: 2 full-time; community resources
Funding: local, Commonwealth Inservice Grant

EPOCH (Jr. High) **Started:** 1983
McCarthy Junior High

Contact: Marcia Greenman Lebeau
250 North Road, Chemsford, MA 01824
(617) 256-6531
Grade(s) served: 7-8, 62 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment: during school, heterogeneous
Model(s): Renzulli's Revolving Door
Time: 6 hours/day, 5 days/week
Staff: 17 full-time; 1 part-time
Funding: local, Commonwealth Inservice Grant

EPOCH, an extension of learning experiences already provided in all Chelmsford classrooms, is designed for those students who are capable of going beyond present classroom enrichment and who are capable of using high-level thinking skills. Participants are challenged to extend themselves academically and are encouraged to use their gifts and talents to reach complex levels of thinking, expression, and creativity.

Three types of learning activities are provided: general exploratory activities; group training; and investigation. The program provides training in skills that the students can apply to classwork as well as to their everyday lives. A **Math Strand** was added to the program, during the 1984-85 school year, to provide extended enrichment for 6th grade students who demonstrated high ability in mathematics.

Instructors provide resource materials and teach specific skills to small groups. They further assist in differentiating the curriculum by presenting demonstration lessons.

CHELSEA

Talented and Gifted Program (TAG) **Started:** 1982
Mary C. Burke
Shurtleff Elementary

Prattville
Williams Elementary

Contact: Barbara Camann
76 Congress Avenue, Chelsea, MA 02150
(617) 889-2258
Grade(s) served: 4-6, 45 students
Curriculum: computers, language arts, social studies, writing skills, independent study
Type: enrichment: heterogeneous, independent study
Time: 4½ hours/day, 1 day/week
Staff: 1 full-time
Funding: local

TAG provides enrichment activities for those children who exhibit superior academic skills.

CHICOPEE

Resources for Enrichment and Advancement in Chicopee (REACH) **Started:** 1983

Barry
Bowe
Litwin
Lambert-Lavoie
Gen. John J. Stefanik
Belcher
Bowie
Chapin
Streiber Memorial School
Bellamy Middle

Contact: Dorothy T. Stachowicz, Litwin School
10 Murphy Lane, Chicopee, MA 01020
(413) 592-6111
Grade(s) served: 4-8, 38 students
Curriculum: creative thinking, problem solving
Type: enrichment: during school, independent study
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy
Time: 2½ hours/week
Staff: 1 full-time
Funding: local, block grant

REACH, based upon the three levels of Renzulli's Enrichment Triad, exposes students to fields of potential interest and encourages the learner to broaden his/her horizon; helps students work toward developing higher level thought processes, stressing creative thinking and problem solving; and encourages students to become an actual investigator of a real problem. Participants' independent research and appropriate methods for inquiry encompass all levels of Bloom's Taxonomy, resulting in an appropriate product that is presented at a system-wide exhibition. In 1984, **REACH** informally served grades 7 and 8; a formal program was scheduled to begin in 1985.

COHASSET

Pupil Enrichment Program (PEP) **Started:** 1978
Deer Hill

Contact: Dorothy Wondolowski
Sohier Road, Cohasset, MA 02025
(617) 383-6115
Grades served: 5-6, 30 students
Curriculum: interdisciplinary
Type: enrichment, acceleration: during school, pull out
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 2½ hours/week; some students participate in 6-week mini-courses, 45 minutes/week.
Staff: 1 part-time
Funding: local

PEP students, who are selected on the basis of achievement tests and teacher recommendation, engage in research and activities which develop cognitive and affective skills. Some students participate in Renzulli's Enrichment Triad Type I activities and minicourses on a wide range of subjects; others use the resource room and the community to pursue Type III independent projects.

CONCORD

Extension Practices in Concord Classrooms (EPIC) **Started:** 1979
Alcott
Concord Middle Peabody
Thoreau
Concord Middle Sanborn
Willard

Contact: Mary Ann Haley
120 Meriam Road, Concord, MA 01742
(617) 369-9500, ext. 312
Grades served: K-8
Curriculum: computers, science, mathematics, language arts, social studies, problem-solving across curricular areas
Type: enrichment, acceleration: during school, heterogeneous, independent study
Model(s): Renzulli's Enrichment Triad
Time: as appropriate throughout school day; primarily within regular classroom
Staff: 1 full-time; classroom teachers
Funding: local

Concord's efforts to address the needs of students who are considered intellectually gifted focus on what does and what can happen within the regular

classroom. The EPIC coordinator provides inservice training workshops for all classroom teachers, and serves as a member of the curriculum support team, which is comprised of mathematics, science, language arts and computer specialists. This team coordinates assessment and evaluation of existing curriculum and determines its future direction. Team members consult with staff, members, and parents when there are concerns about individual students, or when there is a need for curriculum to be compacted or extended.

The EPIC coordinator's primary concern and responsibility is to insure that the core curriculum at a given grade level is content rich, and that teachers have materials and resources available that will enable them to provide for students with different intake abilities. The coordinator insures that curriculum objectives reach well beyond knowledge and comprehension levels to include analyses, applications, syntheses and evaluation of information. (S)He also insures that the thinking processes emphasized appropriately train and invite students to function at these higher levels. When necessary, the coordinator recommends alternative measures for individual students.

DANVERS

Danvers Talented and Gifted Program (TAG) **Started:** 1981

Highlands
Riverside
Willis E. Thorpe
Great Oak
Ivan G. Smith

Contact: Richard P. Santeusanio
76 Pickering Street, Danvers, MA 01923
(617) 774-5100

Grades served: 4-6, 120 students

Curriculum: computers, science, mathematics, language arts, social studies

Type: enrichment, acceleration: during school, homogeneous, independent study, resource room

Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door

Time: 3 hours/week

Staff: 3 full-time; mentors

Funding: local, block grant

The philosophical foundation of TAG is based on the belief that the academic and intellectual potential of all children be fully developed, and that schools have the responsibility to establish learning conditions that will maximize this development. The model chosen to build on this philosophical foundation is Renzulli's Enrichment Triad. All elementary level students participate in Type I enrichment activities. All "talent pool" TAG students participate in Type II group training activities. Some of the "talent pool" students participate in Type III activities, which are the investigations of real problems.

DEDHAM

Thinking Activities for Special Kids (TASK) **Started:** 1979

Avery
Riverdale
Greenlodge
Central 6

Contact: Charleen Lagace, Avery School
123 High Street, Dedham, MA 02026
(617) 326-5354
Grades served: 5-6, 44 students
Curriculum: computers, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, independent study, resource room, pull-out
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 1 full-time
Funding: local

Major aspects of **TASK** are children's literature, computer programming, calligraphy, problem solving, and creative writing. In addition, each child completes an independent study project on a subject of his/her choice.

EASTON

High Ability Learner (HAL) Program **Started:** 1980

Center
Parkview Elementary
Easton Middle
North Easton Grammar
Moreau Hall
Easton Junior High

Contact: Ann Hoyle, Easton Middle School
Lincoln Street, North Easton, MA 02356
(617) 238-4311
Grades served: 4-8, 225 students
Curriculum: computers, science, mathematics, language arts, social studies, drama (all curriculum areas)
Type: enrichment, acceleration: during school, after school, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Guilford's SOI
Time: 2 hours/week
Staff: 1 full-time; 1 itinerant; 30 mentors; 2 artists-in-residence; 2 cultural institutions (China Trade Museum & Science Museum)
Funding: local, Oakes Ames Trust Fund

Students are exposed to two components in the **HAL Program.** Three to five percent of the school population receives specialized programming and a differentiated curriculum. A talent pool of up to 35 percent of the student popula-

tion is exposed to challenging activities in special interest areas. Grade K-3 teachers utilize enrichment materials to help motivate and challenge bright students in the classroom.

Special academic programs are presented to students in grades 9-12 as extracurricular activities. Arrangements have been made for high school students to enroll in college level courses at Stonehill College, North Easton, and other institutions of higher learning.

Differentiated activities promote skill development in logical thinking, cognitive reasoning, critical and divergent thinking, creative problem solving, communication, research, and independent study. All curriculum areas are included in the multidisciplinary education programming, which utilizes resource room, mentor program, independent projects, investigations, minicourses, classroom enrichment centers, research tours (sponsored by the Museum of Science), artists-in-residence, and special programs.

Highlights of Easton's program have included museum programs; a cultural exchange program with Yupik Eskimo students from Gambell, Alaska; China culture program; seat belt safety campaign with legislative involvement; team participation in the Massachusetts Future Problem Solving Bowl; debating; The Boston Globe Stock Market Game; Marine Biology Program; literary magazine; literature festivals; invention convention; the Bank and Store Program; and an introduction to foreign language at the elementary level.

EVERETT

Academically Talented Class **Started:** 1968
Centre
Albert Parlin Junior High
Everett High

Contact: William T. Harrington
587 Broadway, Everett, MA 02149
(617) 389-7950, ext. 150
Grades served: 4-12, 213 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: acceleration: during school, homogeneous; H.S. AP
Time: 5 hours/day, 25+ hours/week
Staff: full-time
Funding: local

Everett Public Schools has three offerings:
Intermediate (grade 4-6): science, mathematics, language skills, computer science, Spanish (grades 5 & 6), and music and art enrichment;
Junior High (grades 7 & 8): accelerated science, mathematics (algebra), English, social studies, computer science, and Spanish. (Weighted GPA);
High School: advanced level--sciences, mathematics, social studies, English, computer science; advanced placement--mathematics, English, history, biology, and chemistry. (Weighted GPA).

FALL RIVER

Volunteer Mentor Program **Started:** 1983
All 31 elementary schools B.M.C. Durfee High

Contact: Helen Marie Booth
417 Rock Street, Fall River, MA 02720
(617) 678-4571
Grades served: 2-6 & 10-12, 145 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment: during school, after school, heterogeneous, independent study
Time: 1-2 hours/week; 1 day/week; 35 weeks/year
Staff: 1 part-time; 35 mentors
Funding: block grant

Since 1984 the emphasis of the mentor program has been on 5th graders. Fifth graders show an enthusiasm for learning, and they are readily identifiable by their teachers as having a particular gift or interest. Fifth graders were specifically chosen for this program because this is the year when real attendence problems first surface. If a strong enough incentive can be instilled in students through this program, it is possible that a later drop-out problem may be avoided.

The program matches 5th graders with student mentors from the 11th and 12th grade Honors classes. Students are matched on the basis of mutual interest in a particular field or subject. The fifth graders go to the high school to meet with their respective mentors in an academic setting: a laboratory, the planetarium, or the library. The student mentors have a flexible plan, which is discussed with a member of the high school faculty. It has been demonstrated that the 5th graders relate well to the older students, who in turn develop a sense of responsibility to their young charges, and a heightened awareness of the subject which they are teaching.

One-to-one mentor relationships with members of the community is ongoing for all grades, system-wide. No mentorship is denied if it is workable.

FRAMINGHAM

SAGE* **Started:** 1979

*SAGE is a National Diffusion Network program, approved by the Joint Dissemination Review Panel in Washington, D.C. SAGE provides widespread use of its program strategies and curriculum to school districts in Massachusetts as well as across the country, through training and dissemination of program products.

Brophy
Charlotte A. Dunning
Hemenway
Juniper Hill
Memorial/Cameron
Potter Road
Mary E. Stapleton Elementary
Miriam F. McCarthy School
Woodrow Wilson

Contact: Diane Modest, Barbieri School
Dudley Road, Framingham, MA 01701
(617) 872-3546/3547
Grades served: 1-6
Curriculum: interdisciplinary; 3-fold--thinking skill development, mini-study units, independent study
Type: during school, resource facility
Model(s): a resource and consultant teacher model
Time: 3 hours/week; other time integrated into regular classroom
Staff: 5 full-time; 4 itinerant; mentors
Funding: local

SAGE serves students in a resource facility by integrating the SAGE curriculum into the regular classroom. Integrated activities include demonstration lessons, incorporated materials, teacher-idea packets, activity centers, and challenging school activities.

SAGE is based on a three-part model:
(1) Thinking Skill Development: presents activities to stimulate and challenge students to perform at higher levels of thinking; assists students to develop system of inductive, deductive, and creative thinking skills; and presents specific instruction in information gathering, organizing, and utilizing resource materials.
(2) Mini-Study Units: include resources and background information not available through the regular curriculum. It is an interdisciplinary extension of the regular curriculum, and incorporates thinking-skills activities in broad topic areas.
(3) Independent Study: allows students to extend and enrich their knowledge of interest/content areas. Using a variety of discovery, inquiry, and exploration techniques, the students probe a content area individually or in a small group. As students identify an interest area, they are matched with a parent or community member in a parent/community mentorship program. This use of community resources, linking a child with a locally available content specialist, allows students to pursue interest beyond the confines of the classroom. Mentors act as role models and offer intensive real world experiences.

FRANKLIN

Expansion/ATP/Individualized Art **Started:** N/A
Horace Mann

Contact: Tom Mulvihill or Susan Turner
Horace Mann School or Oak School, Franklin, MA 02038
(617) 528-5600
Grades served: 6-8, 100 students

Curriculum: science, art, language arts, social studies, mathematics
Type: enrichment, acceleration: during school, independent study, team teaching, resource room
Model(s): Renzulli's Enrichment Triad, Guilford's SOI, Bloom's Taxonomy, Talented Artists
Time: 4 hours/day, 5 days/week, Expansion
6 hours/week, ATP
1½ hours/week, Individualized Art
Staff: 2 full-time
Funding: local

Expansion's original program funding was used to train teachers to more effectively teach higher level thinking skills through existing curriculum. Units which were written under the initial funding program are now used regularly in instructing gifted groups.

ATP encourages students to use creative problem solving and higher level cognitive skills.

Individualized Art, a noncredit program for talented artists, supplements regular art instruction. Entry into the program is by competition. Participants display their work in various exhibits throughout the year.

FREETOWN

Enrichment Program **Started:** 1977
Freetown Elementary

Contact: August Pereire, Jr.
43 Bullock Road, E. Freetown, MA 02717
(617) 763-5121
Grades served: 3-4, 48 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, heterogeneous, independent study
Model(s): Bloom's Taxonomy
Time: 3/4 hours/week
Staff: 1 full-time
Funding: local

Learning centers are used in Freetown to start children at the knowledge/comprehension levels of thinking and raise them through the levels of application, analysis, synthesis, and evaluation. Students are challenged by problem-solving activities that stimulate critical thinking with high motivational content; hands-on activities that satisfy the desire to know how and why something does or does not work, e.g. experiments, investigations; skill-related books and games

that generate enthusiasm for learning and reinforce knowledge already acquired; independent study units that encourage students to work independently, become self-sufficient, and delve into specific interests; communications/simulations that provide opportunities for opening creative minds, inventing, and expressing ideas productively; and explorations that provide the inquisitive with carefully designed projects to pique curiosity and enhance the desire to investigate.

The computer segment of the program helps develop computer literacy by offering students opportunities to be creative, invent new ideas and find new means of expression, and to take on more interesting and complex problems. The concepts of problem solving, information handling, and social issues are reinforced and applied in many different ways throughout the curriculum; the foucs is on information handling and problem solving. The use of a computer, which eliminates much of the "black or white" in learning, lets students discover what is wrong and correct their own mistakes. The computer program incorporates both formal and procedural thinking processes, building on regular classroom procedural skills.

GEORGETOWN

Student Computer Instructional Progam (SCIP) **Started:** 1982
Georgetown Junior-Senior High

Contact: Gitti Silverman, Georgetown High School
1 Winter Street, Georgetown, MA 01810
(617) 352-8113
Grades served: 7-8, 30-40 students
Curriculum: computers
Type: enrichment: during school, heterogeneous
Time: 3 hours/week, 3 days/week
Staff: 2 student instructors; mentors (volunteers)
Funding: local

Junior high students take an introductory computer course taught by high school students. Students who take an advanced computer course in the 7th grade are offered the opportunity (if space allows) to take an advanced computer course in the 8th grade. The students' records and grades are kept by the student instructors. Student instructors create the lesson plans, but scheduling and reports are done and approved through the principal's office.

GRAFTON

High Achieving Gifted & Talented Program **Started:** 1981
North Grafton Elementary South Grafton Elementary
Grafton Elementary

Contact: Richard D. Sanderson
44 Waterville Street, North Grafton, MA 01536
(617) 839-5483
Grades served: 3-6, 275 students
Curriculum: science, mathematics, language arts, social studies, art, reading
Type: enrichment: during school, homogeneous, heterogeneous
Time: 1 hour/week
Staff: 1 full-time; 20 parent volunteers
Funding: local, PTO/parents

The **Junior Great Books** program serves selected students in grade 3. Students read contemporary fiction and children's classics chosen by the Great Book Foundation. Emphasis is on interpretive reading and reflective thinking.

The **Challenge Box** program is a pull-out enrichment program serving students in grades 4-6. It encourages independent and creative thinking through highly motivating activities.

GROVELAND

Program for Academic and Creative Enrichment (PACE) **Started:** 1978
Dr. Elmer S. Bagnall

Contact: Mary Jane Tibbetts
School Street, Groveland, MA 01834
(617) 372-8856
Grades served: K-6, enrichment = 500 students, pull-out = 30 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, leadership
Type: enrichment: during school, talent groups (short duration)
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: academic pull-out (g.5 & 6), 1 day/week;
g.3 & 4, ½ day/week
Staff: 1 full-time; mentors; 5 cultural institutions (e.g., Haverhill Art Association)
Funding: local

PACE is designed to give gifted and talented children experiences and responsibilities within a differentiated curriculum. The goals are to have students understand, develop, and use higher mental processes; satisfy affective, social, and performance needs; develop the ability to use reference tools and research methods; and engage in independent study resulting in a product that is shared with an audience.

Selection criteria include: a referral form; individual intelligence test score of 130 or above; achievement test averages of 90 percent or above; teacher evaluation of learning, creativity, leadership and motivation using Renzulli's

SRBCSS*; creativity testing; acceptance by the selection committee; and parental acceptance.

PACE offers three basic units: **General Enrichment, Talent Groups,** and **Specialized Resource Room.** The program is supported by a team of interested parents and friends who form an enrichment team. This team develops and produces learning materials, answers and initiates correspondence, leads group discussions, and coordinates activities.

HANOVER

Shared Appproach to Gifted Education (SAGE) **Started:** 1984
Cedar Elementary Center Elementary
Sylvester

Contact: Connie O'Brien
65 Silver Street, Hanover, MA 02339
(617) 826-2631
Grades served: 3-5, 107 Students
Curriculum: science, mathematics, language arts, social studies, music, art, interdisciplinary
Type: enrichment: during school, homogeneous, heterogeneous, independent study, team teaching, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: varied/revolving
Staff: 1 itinerant
Funding: local, Commonwealth Inservice Grant

SAGE is comprised of inservice training for classroom teachers, a weekly newsletter, and classroom demonstrations. Type I enrichment programs are run by an enrichment teacher team, administrators, and parents. Type II minicourses are taught by the resource teacher, classroom teachers, and parents. An independent studies program, Type III, is in the planning stages.

HARWICH

Harwich Enrichment Program **Started:** 1982
Harwich Elementary

*Scale for Rating Behavior Characteristics of Superior Students

Contact: Jon Wordell
South Street, Harwich, MA 02645
(617) 432-0940 or 432-2420
Grades served: K-6
Curriculum: science, mathematics, language arts, social studies, music, art, problem solving, literature
Type: enrichment: during school, after school, homogeneous, heterogeneous
Model(s): Newton Advance Challenge Program, locally developed
Time: varies from 1-10 periods/week, 20-50 min/period
Staff: 1 full-time; several full- or part-time staff involved in one or more periods/week; cultural institution (Cape Cod Museum of Natural History); various mentors
Funding: local

Harwich's **Enrichment Program** offers challenging curriculum units for student/teacher use in the classroom. The enrichment teacher and volunteers work with selected groups in specific academic areas. The Massachusetts Association for the Advancement for Individual Potential's **Future Problem Solving,** a math league, **Junior Great Books Foundation,** and the **Newton Advance Challenge** curriculum are among the program offerings. **Suzuki Strings** is offered to all 1st and 2nd graders, and is an elective for 3rd and 4th graders. Specialists provide interest groups with extra opportunities in music and art. Trained volunteers assist in making the programs available to as many students as possible.

HAVERHILL

Gifted and Talented **Started:** 1983

Bartlett
Crowell
Caleb Dustin Hunking
Dr. Paul Nettle
John G. Whittier
Consentino

Contact: Lisette Kaplowitz
4 Summer Street, Haverhill, MA 01830
(617) 374-1901
Grades served: 5-8; grades K-4, just beginning
Curriculum: mathematics, language arts
Type: enrichment: during school
Model(s): Renzulli's Enrichment Triad
Time: depends on project & teacher
Staff: full-time; mentors
Funding: block grant, Commonwealth Inservice Grant

This program is designed to encourage all middle school students to participate in activities and lessons at their highest level of readiness and ability. Pupils are instructed by regular classroom teachers who elect to avail themselves of particular instruction materials and/or inservice training. Teachers

evaluate, select and/or create appropriate teaching resources and materials to meet the wide range of students' abilities. The classroom environment is designed to nurture and support creativity and to deal with the affective dimensions of giftedness.

HINGHAM

Elementary Alternative Program (AP) **Started:** 1980
East Elementary
Wm. L. Foster Elementary
Plymouth River
South Elementary

Contact: Dorothy Galo
41 Pleasant Street, Hingham, MA 02043
(617) 749-5320
Grades served: K-6
Curriculum: computers, mathematics, language arts, music, art
Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: varies according to program component
Staff: 20 part-time; 3-5 mentors
Funding: local

Elementary AP encompasses a number of options for gifted and talented students. Differentiation within the classroom is the responsibility of every teacher of a gifted student. Several pull-out programs provide additional service, usually on a weekly or biweekly basis: **Great Books** (grades 3-6), **Math Plus** (grades 4-6), **Art Enrichment** (grades 4-6), and **Physical Education Enrichment** (grades 3-6). These programs are by invitation, with classroom and specialist teachers providing recommendations and objective guidelines for the math and **Great Books** programs.

HOLLISTON

Activities for Academically Able Learners **Started:** N/A
Andrews
Miller
High School 4th grade Annex

Contact: Jane K. Izod, Miller School
Woodland Street, Holliston, MA 01746
(617) 429-1600
Grades served: K-4, 80 students
Curriculum: science, mathematics, language arts, social studies, problem solving
Type: enrichment, acceleration: during school, after school, homogeneous, independent study, resource room

Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Renzulli's Curriculum Compacting, Guilford's SOI
Time: 1½ hours/week; after-school program, Monday-Friday, 1-hour courses
Staff: 1 part-time; administrator-teacher-parent advisory committee
Funding: local

Children are grouped into reading and math classes according to their abilities. Curriculum is accelerated above grade level for academically able learners. A resource room program is available for grades 3 and 4; emphasis is on problem solving through varied content areas. A self-supporting after-school program consists of offerings in computers, drama, fine arts, dance, cooking, sports, and gymnastics.

Advanced Study Program **Started:** 1978
Holliston High

Contact: Robert J. Berardi
Hollis Street, Holliston, MA 01746
(617) 429-5060
Grades served: 9-12, 226 students
Curriculum: computers, sciences, calculus, language arts, social studies, music, art, foreign languages
Type: enrichment
Model(s): Renzulli's Enrichment Triad
Time: 4.5 hours/week
Staff: 2.6 full-time
Funding: local

The **Advanced Study Program** is a compilation of advanced placement and college credit courses developed to challenge students. Each course is designed to enrich students and reinforce their gifted behaviors. Courses demand a high task commitment from students, requiring them to direct generalized energies. Opportunities for creativity are many; students are shown new and unusual ways to generate ideas, and how to challenge the existing ways of doing things in school or in any field of study.

High ability students are taught integrated instructional activities: how to explore and identify special areas of interest; how to develop the process tools for investigating those interests; and/or how to become a first-hand inquirer into real world problems of interest.

LANESBOROUGH

Special Program of Intellectual and Creative Expression (SPICE) **Started:** 1984
Lanesborough Elementary

Contact: Nancy Shea
188 Summer Street, Lanesborough, MA 01237
(413) 443-0027
Grades served: K-6
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Model(s): developing own model
Time: varies
Staff: 1 part-time
Funding: local

SPICE is in a developmental phase. Initially, a large group of students received extended testing and evaluation. In January 1985, a smaller number of students were selected to work with the program instructor on a regular basis. Programs that were being considered include: **Philosophy for Young Children** (Institute for the Advancement of Philosophy for Children) and an interdisciplinary, topic development model that emphasizes the relatedness of various subject matters and provides the skills necessary for the production of high quality work. The program will emphasize the development of high level thinking and creative skills. Students involved in the initial testing and evaluation will be invited to attend an after-school program and may be considered for an intensified program at a later date.

LEE

Project Phoenix **Started:** 1982
Lee Elementary

Contact: Warren Reynolds
122 High Street, Lee, MA 01238
(413) 243-0336
Grades served: 1-4, 169 students
Curriculum: computers, mathematics
Type: enrichment, acceleration: during school, heterogeneous
Time: 1 hour/week

Phoenix exposes children to a variety of projects. Although parents, teachers, and interested adults all help with the program, its success has been hampered by a lack of classroom teacher time. A teacher committee, under the direction of the school psychologist, has been working on a program for gifted students in grades 3-6. This program is projected to commence in September 1985. Tentative plans include acceleration and enrichment in many areas, learning resource and computer skills, and having students do indepth studies of the community and other pertinent topics.

LEOMINSTER

Program for Academically Advanced Students **Started:** 1982

Fall Brook
Northwest
Southeast Elementary
Johnny Appleseed
Priest Street

Contact: Judith P. Mulhern
45 Stearns Avenue, Leominster, MA 01453
(617) 534-7756
Grades served: 3-6, 1336 students
Curriculum: science, mathematics, language arts, social studies, thinking skills
Type: enrichment: heterogeneous
Model(s): Renzulli's Enrichment Triad
Time: depends on classroom teacher
Staff: all grades 3-6 regular classroom teachers in system
Funding: block grant

All pupils participate in activities which develop thinking skills.

LEXINGTON

Special Abilities Program **Started:** 1973

Jonas Clarke Junior High
Wm. Diamond Junior High
Lexington High

Contact: Isa Zimmerman
1557 Massachusetts Avenue, Lexington, MA 02173
(617) 862-7500
Grades served: 7-12, 50 students each
Curriculum: computers, science, mathematics, language arts, social studies, music, art, drama
Type: enrichment, acceleration: during school, independent study
Time: 2 hours/week, math; others, individually scheduled
Staff: full-time; part-time; itinerant; artist-in-residence
Funding: local

At the secondary level, a combination of accelerated, elective, independent study, and advanced placement programs aid in the development and support of students' gifts and talents. The art program offers enrichment in portfolio development, independent study, computers, and graphics. In the drama program, production, public speaking, and performance skills are stressed. In music, the emphasis is on concert choir, madrigal singers, wind ensembles, harmony and analysis, and independent study. Also, an active tournament debate program is being partially funded by student/parent activities.

An elementary program is being reviewed. For information about this program, please call the contact person.

LONGMEADOW

Kids in Need of Differentiated Learning Experiences (KINDLE) **Started:** 1978
Blueberry Hill Center — Wolf Swamp Road

Contact: Judith Williams
811 Longmeadow Street, Longmeadow, MA 01106
(413) 567-0316
Grades served: 1-5, pull-out = 50 students, enrichment = 70 students
Curriculum: multidisciplinary
Type: enrichment: during school, pull-out, resource room
Model(s): Renzulli's Enrichment Triad
Time: 2½ hours/week, pull-out; 45 minutes/week, enrichment
Staff: 1 full-time/itinerant
Funding: local

KINDLE is designed to meet the special needs of gifted and talented students by offering them differentiated learning experiences. Students referred for the program are evaluated in seven areas which cover intelligence, creativity, achievement, and learning characteristics. Skills emphasized are in the areas of creativity, inquiry, and problem solving.

LOWELL

Project IDEA **Started:** 1984
Peter W. Reilly E.N. Rogers — James S. Daley Junior High

Contact: Robert A. Dempsey
89 Appleton Street, Lowell, MA 01852
(617) 454-5431, ext. 276
Grades served: 1-6, 150 students
Curriculum: computers, science, mathematics, language arts, social studies, creative thinking skills
Type: enrichment, acceleration: after school, heterogeneous
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 1¼ hours/week, 24 weeks/year
Staff: 20 part-time
Funding: local, Commonwealth Inservice Grant

Students in **Project IDEA** are at present being instructed in four disciplines; each discipline receives six weeks of intensive study. Two sites are utilized, with three additional sites in the planning stages.

LUNENBERG

Lunenburg Extra Achievement Program (LEAP) **Started:** 1984
Thomas C. Passios Elementary

Contact: Carol McManus
1025 Massachusetts Avenue, Lunenburg, MA 01462
(617) 582-6232
Grades served: 3-5, 15 students
Curriculum: computers, language arts, social studies, art
Type: enrichment: during school, homogeneous
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/day, 4 days/week
Staff: part-time
Funding: none

LEAD concentrates on social changes from the early Nineteenth Century to the present. The Community at Old Sturbridge Village (circa 1830s) is the program reference. Students also take part in creative problem-solving sessions and participate in individual projects.

LYNN

Project Summit for Gifted and Talented Children **Started:** 1980
Aborn
A. Drewicz Elementary
Brickett Elementary
Julia F. Callahan
Cobbett Elementary
Wm. P. Connery
E.J. Harrington
Highland
Hood
Ingalls
Lincoln
Lynn Woods
Sewell-Anderson
Capt. William G. Shoemaker
Edward A. Sisson
Tracy
Washington Community

Contact: Marilyn E. Fogarty, Edward A. Sisson School
56 Conomo Avenue, Lynn, MA 01904
(617) 598-0029
Grades served: 4-6, 175 students
Curriculum: computers, mathematics, language arts, social studies
Type: enrichment: during school
Time: 1 day/week
Staff: 3 full-time
Funding: local

Course offerings include literature, creative writing, math, logic, research, communication skills, and computer programming (LOGO and BASIC).

LYNNFIELD

Elementary Academically Talented (AT) Program **Started:** 1980
Huckleberry Hill Lynnfield Middle School
Summer Street

Contact: Ritamarie Macadino, Huckleberry Hill School
Knoll Road, Lynnfield, MA 01940
(617) 334-5545
Grades served: 4-6, 44 students
Curriculum: computers, science, language arts, social studies
Type: enrichment: during school, pull-out, resource room
Model(s): Renzulli's Enrichment Triad, Guilford's SOI, Bloom's Taxonomy
Time: 1 day/week
Staff: 1 full-time
Funding: local, AT parent group

Ten to 15 students from each intermediate grade are identified as academically talented. Each grade has its own day on which to report to the AT classroom at Huckleberry Hill School, where students participate in a differentiated curriculum. The curriculum at each grade level revolves around various themes, but all students read, discuss, and write about various pieces of literature.
Grade 4 investigates the area of communications by indepth exploration of subtopics such as computers, computer programming, robotics, advertising, codes and cryptology, foreign languages, and techniques of written communications.
Grade 5 explores the themes of government and communications through activities such as publishing a school newspaper, participating in simulations about local and national government, and refining oral speaking skills.
Grade 6 students branch out into past, present, and future communications by examining ancient Egypt's hieroglyphics, law and the debating skills, and future communications.

Middle AT Program **Started:** 1982
Lynnfield Middle School

Contact: Ritamarie Macadino, Middle School
Main Street, Lynnfield, MA 01940
(617) 334-4000
Grades served: 7-8, 22 students
Curriculum: language arts, social studies
Type: during school, group project/simulations
Model(s): Renzulli's Enrichment Triad
Time: 1½ hours/week
Staff: 1 full-time
Funding: local, AT parent group

The Middle School AT program is divided into two segments. During the first half of the year, the AT teacher works closely with a representative from **Project Adventure/Adventures in Leadership.** Students examine the theme of leadership from many perspectives--reading, interviews, videotapes, and group initiatives. Then, acting as leaders in the community, students investigate a real-life community problem, and pose and present solutions to the problem. During the second half of the year, students participate in group simulations.

MANCHESTER

Contact: Elizabeth Murray, Memorial School
Lincoln Street, Manchester, MA 01944
(617) 526-1908

Academically Talented Program (ATP) **Started:** 1980
Manchester Junior-Senior High Memorial

Grades served: 4-8
Curriculum: computers, science, mathematics, language arts, social studies
Type: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 3 hours/week
Staff: 1 full-time; mentors
Funding: local

The goals for ATP are: to develop students' abilities for critical thinking, creativity, and problem solving with special emphasis on the higher cognitive functions of analysis, synthesis, and evalulation; to build on students' foundations in basic skills; and to provide students with an atmosphere of social acceptance and a format for intellectual stimulation, both of which derive from interaction with their particular peer group. The program encourages students to develop interdisciplinary approaches. Working in the investigative manner, on real problems of their own choosing, students seek solutions and develop products that they share with interested audiences. At the end of each quarter, each student writes a narrative commentary on what has been accomplishesd in ATP classes. A copy of the narrative is sent home with the report card and another copy is given to the ATP teacher.

Advanced Studies Program (ASP) **Started:** 1982
Memorial

Grades served: 4-6, approximately 58 students
Curriculum: science, language arts, social studies

Type: enrichment: after school, homogeneous
Time: 1 hour/week
Staff: 1 full-time; 5 part-time
Funding: local

ASP's goals are: to develop talented students' ability for critical thinking toward the higher levels of creativity and problem solving, with special emphasis on higher cognitive functions; to extend and enrich areas of academic strengths for students who have demonstrated outstanding classroom performance; and to inspire students with latent academic talents to perform up to their fullest abilities. The program is comprised of two 10-week terms. Courses are held in the Memorial School building or at a trip site. Offerings depend upon the academic strengths of students recommended for the program: reading, mathematics, writing, science and/or social studies.

MANSFIELD

Curriculum Enrichment Program **Started:** 1982
Park Row

Contact: Joanne C. Andershonis
Park Row, Mansfield, MA 02048
(617) 339-4595
Grades served: K-8
Curriculum: science, mathematics, language arts, social studies, music, art
Type: enrichment: during school, heterogeneous, pull-out, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy, Taylor's Multiple Talent
Time: varies, depending on activity
Staff: 4 full-time; classroom teachers
Funding: local

Mansfield offers a general enrichment program, an academically talented class, and an independent study option (which is available to any student) to serve individuals, and small and large student groups. Within the general enrichment program, students and teachers select from a variety of minicourses which are both content and process oriented to develop varied talents.

Students demonstrating an academic talent in the areas of reading and language arts participate in a daily pull-out program. Their grade level curricula are compacted, allowing for advanced level training in such processes as suggested by Renzulli's Triad, as well as individual or small-group investigations. The independent study option is designed to train students in the "how to" of investigation; staff is responsive to students demonstrating readiness for advanced level investigation.

MARION

Project LIFT **Started:** 1979
Sippican

Contact: Kate Jackson
16 Spring Street, Marion, MA 02738
(617) 748-0100
Grades served: K-6, 340 students
Curriculum: science, mathematics, language arts, thinking skills
Type: enrichment, acceleration: during school, homogeneous, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: varies, depending on grade & ability
Staff: 1 full-time
Funding: local

Project LIFT's focus is to train and encourage classroom teachers to use creative and critical thinking skills daily, with all children. Third through 6th grade students, selected because of achievement, motivation, and/or potential, receive additional instruction in thinking and writing skills. **LIFT** sponsors a math team which competes with other elementary schools in the area in the **Mathematical Olympiads of Elementary Schools.** Research skills and independent study projects are a vital part of the program in grades 3-6. Three times a year, students publish a magazine of students' writings and illustrations. The program tries to reach and develop the strengths of each child based on his/her interests and abilities.

MARSHFIELD

Academically Talented Program **Started:** 1983
Daniel Webster
South River
Furnace Brook School
Governor Edward Winslow
Eames Way

Contact: Susan Brennan, Furnace Brook School
Marshfield, MA 02050
(617) 837-5037
Grades served: 4-6, 106 students
Curriculum: computers, language arts
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 4½ hours/day, 4 days/week = 4th & 5th grades;
2 hours/day, 5 days/week = 6th grade
Staff: 2 full-time; 1 itinerant

Funding: local

Students are nominated annually for Marshfield's program. Selection is based on high academic achievement in the classroom and achievement test scores. Teachers rate each student using a modified version of Renzulli's checklist. Approximately 14 percent of a grade population is served through this program.

MASHPEE

Future Problem Solving Program **Started:** 1984
Mashpee Middle School

Contact: Trish Parolski, Mashpee Public Schools
Old Barnstable Road, Box 546, Mashpee, MA 02649
(617) 477-1272
Grades served: 8, 6 students
Curriculum: language arts, social studies
Type: acceleration: during school, homogeneous
Time: 1½ hours/week
Staff: 1 full-time

A mentor program was scheduled to start in the 1985 winter/spring term in the areas of art, science, and literature.

MAYNARD

Enrichment Program **Started:** 1983
Roosevelt Green Meadow

Contact: Judy York, Roosevelt School
Nason Street, Maynard, MA 01754
(617) 897-8246 or 897-8142
Grades served: 1-4, 60 students
Curriculum: science, language arts, social studies, thinking skills
Type: enrichment: during school, homogeneous, resource room
Model(s): Renzulli's Enrichment Triad
Time: ½-3/4 hours/day, 1-2 days/week
Funding: local

Thinking and research skills, as well as affective training, are part of this pull-out program. The goal is to help students become independent learners.

Language Arts Enrichment **Started:** 1981
Emerson Fowler Junior High

Contact: Judy Johnson, Fowler Junior H.S.
Summer Street, Maynard, MA 01754
(617) 897-6701
Grades served: 5-8, 60 students
Curriculum: language arts
Type: enrichment: during school
Time: 1 hour/week
Staff: 1 full-time
Funding: local

The language arts program is for students who have demonstrated creative ability or high potential in an intellectual capacity. Emphasis is on small-group investigation of special topics, guided independent study, high-level thinking activities, and oral and written language skills. Students are given opportunities to utilize the resources of the computer center, darkroom, and the audiovisual department.

Science Enrichment **Started:** 1981
Emerson Fowler Junior High

Contact: Chuck Bennett, Fowler Junior High School
Summer Street, Maynard, MA 01754
(617) 897-6701
Grades served: 7-8, 65 students
Curriculum: science
Type: enrichment, acceleration: during school, homogeneous
Time: 5 hours/week
Staff: 1 full-time
Funding: local

The objective of the **Science Enrichment** program is to stimulate creative thinking through careful observation and experimentation, and to reinforce concepts through inquisition and self-design. Eighth graders explore the disciplines of chemistry and physical science; 7th graders study biology.

MEDFORD

Office of Gifted and Talented Services **Started:** 1982
Medford High

Contact: Marilyn Blumsack
489 Winthrop Street, Medford, MA 02155
(617) 396-5800, ext. 309 or 219

Grades served: 7-10
Curriculum: career education
Type: enrichment: during school, after school, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy, Williams' Cube
Time: 3-5 hours/week, 3-7 weeks/year
Staff: 1 full-time; 4 college interns; 5 mentors
Funding: block grant

Parent/college volunteers lead discussion groups in the **Junior Great Books** component of the program. The development of research skills and a tutorial program also are provided in the junior high schools. At the high school level, students also are offered: **World of Work**, a career awareness and exploration course; **Project Spotlight**, which focuses on social development, and minicourses at Suffolk University and Emmanuel College; The Boston Globe's stock market game; chess; a dungeons and dragon club; field trips; and college courses at nearby colleges (for junior and seniors). Students may elect to take one or more of these programs during their homeroom period, study, or after school.

Inservice courses are provided to teachers, and graduate students serve on the screening committee as part of the course requirement of "Characteristics and Identification of the Gifted/Talented Student." Criteria include the U.S. Office of Education's and Joseph Renzulli's identification model. As the program expands and there is more teacher involvement, the enrichment triad model will be practiced in all participating schools. An after-school enrichment program has been successfully offered in Spring '85 with the help of parents.

MELROSE

Melrose Gifted and Talented Program **Started:** 1984
235 West Foster Street, Melrose
All (8) elementary schools Melrose Senior High
Melrose Junior High

Contact: Marge Silvestri, Melrose Jr. High
Lynn Fell Parkway, Melrose, MA 02176
(617) 662-2000, ext. 273
Grades served: K-6, 45 students; also 7-10
Curriculum: science, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, homogeneous
Model(s): Renzulli's Enrichment Triad
Time: 4 hours/day, 1 day/week
Staff: 1 full-time; mentors
Funding: local

Melrose has just begun a citywide program to provide challenge, while training students how to think and learn. Students were identified in grades 4-6 from all eight elementary schools; each grade meets separately. A broad-based

theme, using a multidisciplinary approach, provides Type I activities--developing research, thinking, and independent learning skills--that encourage students to be investigators of real problems. Nominated students, although not tested until the completion of grade 3, are part of the talent pools for grades K-3. They remain in the classroom for enrichment programs, with the gifted and talented teacher providing support and materials on a consultant basis. Occasionally this talent pool may group for short-term minicourse seminars.

At the junior high schools, a similar program operates under the direction of the gifted and talented teacher. Special enrichment programs with guest speakers are offered; a **Future Problem Solving** team for grades 7-9 has been started; and a small group of 10th graders participate in **Project Summa** at Emmanuel College.

MERRIMAC

Recognizing Excellence
in the Arts, Classroom & Home (REACH) **Started:** 1983
Helen R. Donaghue School Red Oak School

Contact: Ann Jones, Red Oak School
Union Street Ext., Merrimac, MA 01860
(617) 346-8921
Grades served: K-6, 500 students; pull-out = 30 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, homogeneous, heterogeneous, pull-out, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: pull out, 1 day/week; rotating talent groups, 45 minutes/week, 6- to 8-week cycles
Staff: 1 full-time; specialists, mentors
Funding: local

REACH is designed to build sequential skills, and to challenge student abilities; it offers both whole-class enrichment activities as well as small-group instruction. The program provides a setting for the development and maintenance of task commitment, and the expression of creativity. It offers general enrichment for all students; specific activities for students with special interests and talents; training exercises for the development of multiple talents; a differentiated curriculum for gifted students; and a specialized part-time pull-out program for gifted students in grades 3-6.

Students' abilities, interests, and needs are determined so that effective program components can be developed and administered. All students participate in the first four steps to the identification of the talent pool; further screening instruments are administered to better identify the population of gifted students. The full screening process includes: achievement and aptitude

test, parent surveys (I and II), Renzulli/Hartman Scale, and a screening matrix. A **REACH** advisory council and enrichment team assist in the implementation of the program.

MILFORD

Enrichment Program **Started:** 1982
Woodland
Milford East
Milford High

Contact: Leonard C. Oliveri
31 West Fountain Street, Milford, MA 01757
(617) 478-4236
Grades served: 2-12, 40-50 students
Curriculum: computers, science, mathematics, language arts, art, electronics, video production
Type: enrichment: after school, heterogeneous, Saturdays
Model(s): Renzulli's Enrichment Triad
Time: 1½ hours/week; 1 day/week; 12 weeks/year
Staff: 8 full-time; 1 itinerant
Funding: student tuition

Milford's program is designed to provide supplemental enrichment to students who wish to broaden their intellectual abilities. The objective is to incorporate noncurricular courses into the students' total academic experience: advanced topics in computer programming, field natural history of New England, introduction to electronic/digital systems, creative writing, enrichment mathematics, seminar in Shakespeare, advanced studio art, and video production. Teachers work with no more than eight students in a group to maximize teacher/student contact. The program has ample financial support for materials, field trips, and resources.

MILLIS

Pull-out Programs (see below) **Started:** 1978
Clyde F. Brown

Contact: Ray Lanthier
Park Road, Millis, MA 02054
(617) 376-8050
Grades served: K-2
Curriculum: computers, science, mathematics, social studies, music
Type: enrichment: during school, pull-out, independent study
Model(s): Renzulli's Enrichment Triad

Time: 1 hour/week
Staff: part-time; 10 mentors
Funding: local, block grant, PTO/parents

Academically Talented (grade 2, 8 students): enrichment in science, social studies, and creative writing.
Special Chorus (grade 2, 18 students): enrichment for musically talented children.
Junior Great Books (grade 2, 15 students per semester): study of classics for the better readers.
Computers (all grades): in-class program for K-2 children; other grade levels throughout school system, pull-out program.

MONSON

Rich Experiences and Challenging Horizons (REACH) **Started:** 1978
Main Street — Monson Junior-Senior High

Contact: Lynn C. Warman
110 Main Street, Monson, MA 01057
(413) 267-4857
Grades served: 3 & 8, 45 students
Curriculum: computers, science, language arts, social studies, music, art
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 2 hours/week
Staff: 1 part-time; 15 mentors
Funding: local

Monson's REACH program encourages original research, based on student interest. A facilitator and mentors assist students with their projects.

NATICK

Project Academically & Creatively Talented Individuals of Natick (ACTION) **Started:** 1980
Bennett-Hemenway — Memorial

Contact: N. Jerome Goldberg
Natick Public Schools, Natick, MA 01760
(617) 651-7109
Grades served: 4-5, 50-55 students
Curriculum: science, mathematics, language arts, social studies, art, thinking skills

Type: during school: homogeneous, pull-out enrichment
Model(s): Renzulli's Enrichment Triad; combination of Renzulli's Enrichment Triad & Bloom's Taxonomy
Time: 4½ hours/week
Staff: 2 part-time
Funding: local

Project ACTION participants meet in one of two resource rooms located at the Bennett-Hemenway and Memorial elementary schools. The project's differentiated programming puts emphasis on the development of critical and creative thinking skills.

NEEDHAM

Program for Academically Creative and Talented Students (PACT) **Started:** 1979

Broadmeadow
John Eliot
High Rock
Hillside Elementary
William Mitchell
Derwood A. Newman Middle
Pollard Memorial Middle

Contact: Rose M. Feinberg
1330 Highland Avenue, Needham, MA 02192
(617) 444-4100, ext. 159
Grades served: 2-8, 192 students
Curriculum: computers, science, mathematics, language arts, social studies, critical & creative thinking
Type: enrichment: during school, pull-out program with PACT teacher
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Guilford's SOI, Bloom's Taxonomy
Time: 2½ hours/week
Staff: 1 full-time; 2 part-time; 1 administrator; cultural resources--speakers, consultants; mentors
Funding: local

PACT is designed to encourage and develop students' critical and creative thinking processes, problem-solving skills, and higher level thinking skills, through areas of study generally not included in the basic curriculum. The Danforth Museum **Junior Curator Program**, and special units developed by PACT teachers, provide challenge and enrichment to students. The **Future Problem Solving** program is an important component at all levels of enrichment. Students meet by grade level in their own schools (some elementary groups are bused). Grades 2 and 3 meet two hours weekly; grades 6-8 meet 45 minutes weekly during the school day, with after-school optional time arranged for special projects and independent study.

NEW BEDFORD

Contact: Grace Frey
455 County Street, New Bedford, MA 02740
(617) 997-4511, ext. 270

Enrichment Program **Started:** 1984

Elizabeth Carter Brooks
Ellen R. Hathaway
Abraham Lincoln
Casmir Pulaski
Jireh Swift
Sgt. Wm. H. Carney Academy
Horatio A. Kempton
John Avery Parker
Thomas R. Rodman
Betsy B. Winslow

Grades served: 6, 25 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, multiethnic studies
Type: enrichment: during school, homogeneous
Time: 5½ hours/day, 5 days/week
Staff: 1 full-time; 2 part-time; mentors
Funding: Chapter 636

New Bedford's program serves students from diverse cultural and racial backgrounds. The program's major objectives are to: reduce racial minority isolation; foster significant student academic growth through instruction in basic skills; provide students with an enriched curriculum, emphasizing research skills, independent study, inquiry, leadership, and creativity training; foster the development of sex/race/culture fair attitudes; provide students with role models and guest speakers, thereby increasing students' self-esteem and career expectations; and integrate talented and gifted students into the school's regular program of instruction to provide a more diverse curriculum and opportunity for student interaction.

Talented and Gifted (TAG) Magnet Resource Program **Started:** 1975
Sgt. Wm. H. Carney Academy, Elm Street

Charles S. Ashley
Elwyn G. Campbell
James B. Congdon
George H. Dunbar
Ellen R. Hathaway
Horatio A. Kempton
Mt. Pleasant
John Avery Parker
Casmir Pulaski
Jireh Swift
Betsy B. Winslow
Elizabeth Carter Brooks
Sgt. Wm. H. Carney Academy
John B. DeValles
Alfred J. Gomes
Hayden/McFadden
Abraham Lincoln
Sarah D. Ottiwell
Phillips Avenue
Thomas R. Rodman
William H. Taylor

Grades served: 4-6, 120 students

Curriculum: computers, science, mathematics, language arts, social studies, music, art, multiethnic studies
Type: enrichment: during school, homogeneous
Time: 5½ hours/day, 1 day/week
Staff: 3 full-time; 2 part-time; various mentors (from project to project; all volunteers)
Funding: Chapter 636

This intrasystem magnet program serves academically talented students of diverse ethnic, racial and cultural backgrounds. Accordingly, the program places heavy emphasis on ethnic studies, multicultural awareness, research skills, independent inquiry, creativity, leadership training, sex equity, and destereotyping. Students are given many opportunities to interact with classmates in a relaxed classroom atmosphere with flexible groupings.

In addition to fostering the needs of student interaction in an enriched setting, the program is committed to curriculum development and infusion. Various important program activities take place in the homeroom on Fridays: TAG teachers divide their day into reviewing and revising programs of instruction, planning and developing new curriculum, developing parent involvement activities, and visiting/conferring with homeroom feeder teachers. Materials are shared with regular classroom teachers who integrate them into their regular curriculum.

NEWBURYPORT

Project Scholastic Program (PORT) **Started:** 1984
Belleville — George W. Brown
Kelly — Rupert A. Nock Middle

Contact: Susan Cohen, R. A. Nock Middle School
Low Street, Newburyport, MA 01950
(617) 462-7141
Grades served: 1-8, 65 students
Curriculum: science, mathematics, language arts, social studies, thinking & creative problem-solving skills
Type: enrichment: during school, homogeneous, pull-out, independent study
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 2 full-time; 1 part-time
Funding: local and federal

PORT is a two-pronged program: **Project Scholastic,** taught by a PORT teacher, is an academic program, which branches out from the regular curriculum. **Project Explore** is a minicourse program taught by specially trained staff members. Students explore minicourses, receive curriculum enrichment, and

develop higher level thinking skills. Students can choose from several three- to six-day courses geared to their grade level; approximately 35 courses are offered systemwide.

High School Leadership Seminar **Started:** 1983
Newburyport High

Contact: J. Emmett Goggin
241 High Street, Newburyport, MA 01950
(617) 462-8731
Grades served: 10-11, 14 students
Curriculum: language arts, philosophy, leadership, theory, training
Type: enrichment: during school, after school, homogeneous, independent study, team teaching, guest speakers, shadowing
Time: 10 days/year (plus independent study and tutoring)
Staff: 20 mentors; 4 classroom teachers (give extra time)
Funding: local

The **Leadership Seminar** is an honors level course offered to selected students in grades 10 and 11, who are judged by their peers and faculty to possess academic talent and leadership potential. Discussion, debate, research, simulation, critical thinking and public speaking comprise the students' activities in the course. In approximately eight full-day sessions and two evening sessions, seminar students hear distinguished visiting speakers address the concepts of leadership. Past speakers have included Senator Paul Tsongas, Mass. Energy Secretary Sharon Pollard, Mass. Educational Commissioner John Lawson, distinguished university professors, military leaders, and local business and professional leaders. Students also read relevant materials, and prepare a position paper on an historical leader. Academic credit is given for a full-year course. An induction ceremony is conducted, and a student-designed symposium concludes the course.

NEWTON

Newton Advance Challenge (NAC) **Started:** 1980
Cabot
Underwood
Williams
Peirce
John Ward
Zervas

Contact: Barbara Carlson
100 Walnut Street, Newton, MA 02160
(617) 964-5925
Grades served: K-6, 800 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment: during school, heterogeneous

Model(s): Differentiated Curriculum within Regular Classroom
Time: 5 hours/day, 5 days/week, 36 weeks/year
Staff: 50 full-time; 4 staff developers
Funding: local

NAC consists of a number of challenging differentiated units of instruction, in content areas designed to meet the needs of gifted and talented students (and all students). Open-ended questions, discovering as well as solving problems, creative and critical thinking, observations, reflection, and hypothesis formation characterize the NAC approach. Differentiation is achieved through a common base with extension, inherent in the activity itself, and self-paced activities. Teacher education is an integral part of the program; it aims to stimulate the intellectual curiosity of teachers, and offers them management, organizational, and recordkeeping strategies in the use of differentiated materials.

NORTH ADAMS

Academic Program for the Talented (APT) **Started:** 1982

East
Johnson
Greylock
North Adams Middle

Contact: Stephen C. Smachetti, East School
Kemp Avenue, North Adams, MA, 01247
(413) 663-5155
Grades served: 3-7, 100 students
Curriculum: mathematics, language arts
Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous, pull-out, independent study, team teaching, resource room
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/week, 36 weeks/year
Staff: 1 part-time
Funding: block grant

APT serves students who are selected on the basis of California Achievement Test results, teacher recommendations, and individual IQ test scores. Students may be selected to participate in creative writing, math problem solving, or literature, depending on their achievement in those areas. Each of the three courses runs for approximately 12 weeks, with a culminating activity designed to display each student's work in a positive manner, and create public interest in the program. Problem-solving competitions are held, and students involved in creative writing produce a collection of stories. Students and their parents receive a written evaluation of the student's performance at the conclusion of each course. A part-time teacher and the North Adams elementary school principal are program coordinators.

NORTH ATTLEBORO

Program for Independent Study **Started:** 1975
North Attleboro Junior High

Contact: William L. Kelly
45 So. Washington Street, North Attleboro, MA 02760
(617) 695-1455
Grades served: 7-8, 10 students
Curriculum: any discipline
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Revolving Door
Time: varied
Staff: 1 full-time media specialist
Funding: local

The **Program for Independent Study** is offered as an elective. Any student working at an above-average level in any discipline, and who is willing to invest time and energy to a task, may be recommended to the media specialist by the classroom teacher. The media specialist acts as coordinator, resource person, and supervisor for the students. Programs are established for the individual student, or for small groups of students. After consultation with the student, teacher, and media specialist, the student may participate in a formally structured research program resulting in a research paper, or create an audiovisual program to be shown in class. The program is individualized to meet the specific needs and interests of each student, and to encourage the students to use their abilities to consistently increase the level of performance in both research and writing skills.

Language Arts Enrichment **Started:** 1982
Allen Avenue
Falls
School Street
Amvet Boulevard
Roosevelt Avenue

Contact: William L. Kelly
45 South Washington Street, North Attleboro, MA 02760
(617) 695-1455
Grades served: 6, 35 students
Curriculum: language arts
Type: enrichment: during school, homogeneous, resource room
Model(s): Renzulli's Enrichment Triad
Time: 1.5 hours/week
Staff: 1 itinerant
Funding: local

Language Arts Enrichment provides supplemental language experience for high ability students. The program combines instruction in advanced writing and research skills with individual projects, based on student interest. Emphasis is placed on the successful completion of a product, to be submitted or presented to a variety of audiences. Criteria for program selection are academic performance and teacher referral, based on motivation, task commitment, and academic ability. Forty percent of language arts time is spent in the program, and the language arts grade accordingly reflects a student's performance in this program.

Evaluation of each student's work consists of a variety of methods, formal and informal, including self, peer, audience, and program teacher evaluations. The program teacher provides quarterly narrative progress reports to parents and students.

Accelerated Program **Started:** N/A
North Attleboro Junior High

Contact: Edward Fox
45 South Washington Street, North Attleboro, MA 02760
(617) 695-6762
Grades served: 6-8, 100 students
Curriculum: science, mathematics, language arts, social studies, art
Type: acceleration: independent study
Model(s): Renzulli's Enrichment Triad
Time: 4 hours/day, 5 days/week, 36 weeks/year
Staff: 12 full-time; part-time
Funding: local

This program is offered to students who demonstrate above-average ability as well as enthusiam, creativity, and a commitment to excellence in task completion. Appropriate test scores and teacher recommendations are required for acceptance into the program.

NORTHBOROUGH

GAIN Program **Started:** 1978
Marguerite E. Peaslee
Lincoln Street

Fannie E. Proctor
Northborough Middle

Contact: M. Patricia Keenan
145 Lincoln Street, Northborough, MA 01532
(617) 393-2558
Grades served: 4-8, 110 student
Curriculum: science, language arts, social studies
Type: enrichment: during school, resource room

Time: 1-2.5 hours/week
Staff: 1 full-time; 1 part-time
Funding: local, Chapter 2 grant

GAIN is intended to enhance and expand the conventional classroom experience. The program identifies grade 4-8 students with demonstrated and documented high academic talent, task commitment, and consistent classroom performance. Staff work with students to improve their critical thinking skills, provoke creative thought and problem-solving abilities, and develop research skills. Separate curriculum units, which address the above skill areas, are developed for middle school and elementary students. Three to five units are introduced yearly, one of which consists of independent study. Fifth graders are involved in a program which is planned, cooperatively, with Higgins Armory Museum staff, and which is supported through funding by the Massachusetts Council on the Arts and Humanities Cultural Resources Program.

NORTHBRIDGE

Gifted Opportunities **Started:** 1979
W. Edward Balmer

Contact: Lucille Harper
Cross Street, Whitinsville, MA 01588
(617) 234-6346
Grades served: 3-6, 149 students
Curriculum: computers
Type: enrichment: during school, homogeneous
Model(s): Renzulli's Revolving Door
Time: .75 hours/week (on a rotating schedule)
Staff: 2 part-time
Funding: block grant

Gifted Opportunities offers teacher-recommended students computer activities (LOGO or Delta Drawing), research on computer history, and terminology and problem-solving activities. Approximately 118 students also are using problem-solving computer software to develop thinking skills. Primary grade teachers are involved in a computer training program, so that they may use the computer in their classrooms for accelerated students.

NORTON

The Wheaton Program (Wheaton College) **Started:** 1973
Norton High

Contact: Rene Tellier
66 West Main Street, Norton, MA 02766
(617) 285-9811
Grades served: 11-12, 5 or 6 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, English, drama
Type: enrichment, acceleration: during school, after school
Time: 1 hour/day, 3 days/week
Staff: guidance & department heads at H.S.; college courses taught by Wheaton professors
Funding: courses, free; no funding necessary

The Wheaton Program allows seniors, and some juniors, to attend nearby Wheaton College (within walking distance) to take college courses in subjects or levels beyond what the high school offers. Five or six students are approved for the program by high school guidance couselors and Wheaton College officials. To be accepted into the program, the student must have done A or B work in the high school level of the respective course; exhausted the school's offerings in that department; maintained a 3.2 grade point average on a scale of 4; and have given evidence of self-direction and motivation. The student's high school program is adjusted accordingly. **The Wheaton Program** is a result of a cooperative agreement between the high school and the college: the college sends education students/majors to practice teach, observe, or tutor; reciprocatively, the high school hires work study students from the college. The program has met with a high degree of success; it has provided college transition experience, enriched the high school curriculum, and strengthened the bond between the high school and the college.

PALMER

Insights **Started:** 1976
Bondsville Elementary
Thorndike Street Elementary
Three Rivers Elementary
Quabaug Elementary
Park Street Elementary
Thorndike Elementary

Contact: Ronald J. Laviolette, Quabaug Elementary School
671 North Main Street, Palmer, MA 01069
(413) 283-3371
Grades served: 6-8, 27 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 3 hours/day, 20 weeks/year
Staff: part-time

Funding: local

Insights is a three-year cyclical program that emphasizes math/science, social studies, and language arts, respectively. Students concentrate on creative problem solving and on the development of divergent thinking skills. The main goal is to teach students to use upper level thought processes that will aid them throughout their life-long educational development. The main thrust in 1984-85 revolved around participation in the Massachusetts **Future Problem Solving Bowl** and on individual research projects. Teams of four students use future problem-solving techniques, including brainstorming, analysis, evaluation, and decision making in wrestling with very difficult hypothetical situations.

Individual research projects are chosen by each student within a general context; this year the subject was math/science. Research skills, as well as writing skills, are emphasized in this aspect of the program. During one class, students go to the library to focus on a research question and to develop a working bibliography. Each spring, student projects are judged and displayed at a science fair. In addition, various enrichment activities are part of every class; puzzles, brainteasers, and problems of all types encourage students to reason, and to look at things in different ways. A field trip to the Talcott Mountain Science Center has resulted in a lesson in astronomy and some hands-on experience in the use of the telescope.

PEABODY

Accelerated and A.P. Programs **Started:** 1970
Veterans Memorial High

Contact: Charles McCarthy
Lowell Street, Peabody, MA 01960
(617) 531-1600, ext. 150
Grades served: 10-12, 250 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: acceleration: during school, homogeneous, independent study
Model(s): ongoing evaluation
Time: 22 hours/week
Staff: full-time
Funding: local

Students are recommended for placement in accelerated and AP classes. Reevaluation is done twice each school year.

Higgins Junior High **Started:** 1979
J. Henry Higgins Junior High

Contact: Hugh McVann
3 King Street Ext., Peabody, MA 01960
(617) 531-1600, ext. 160
Grades served: 8-9, 150 students
Curriculum: computers, science, mathematics, language arts
Type: acceleration: during school, homogeneous
Model(s): ongoing evaluation
Time: 20 hours/week
Staff: full-time
Funding: local

Students are recommended for placement in accelerated classes. Reevaluation is done twice each school year.

Enrichment Program for Academically Gifted **Started:** 1980

John E. Burke
Kiley Bros. Memorial
West Memorial
Thomas Carroll
McCarthy
William E. Welch Sr.

Contact: John E. Murtagh
76 Lake Street, Peabody, MA 01960
(617) 531-1600, ext. 135
Grades served: 4-7, 104 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment: during school
Time: 2½ hours/day, 1 day/week, 20 weeks/year
Staff: 22 full-time
Funding: none; volunteer teachers

Ten different 10-week programs are offered each semester. Students are selected using a formula which includes reading percentile, math percentile, Wisconsin IQ, grade point average, teacher recommendations and a writing sample. A screening committee makes the final student evaluation.

Students can select three programs each semester. Offerings during 1984-85 included electronic music, poetry, stamp collecting, studio art, a survey of **Junior Great Books**, basic first aid, philosophy, a survey course of France, calligraphy, and **Meet the Apple IIe Computer**. Because programs are held at different schools during the school day, parents of participants are asked to provide transportation to and from the school where the particular program is held.

PITTSFIELD

Gifted and Talented Program **Started:** 1982

Allendale
Egremont
Morningside Community School
Williams
West Side Community School
Highland
Pomeroy

Contact: William D. Travis
259 First Street, Pittsfield, MA 01201
(413) 499-7693
Grades served: 4-5, 100 students
Curriculum: computers, science, mathematics, language arts, music
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 3 hours/day, 1 day/week, 30 weeks/year
Staff: 1 full-time; various mentors; 1 aide
Funding: local, block grant

Students in Pittsfield's program are transported to a classroom designated for enrichment activities; activities range from computers to music composition. Rezulli's Enrichment Triad Model is the base on which individual and group activities are designed. Renzulli's Revolving Door Model is employed to move students back into their regular classroom; this model serves to release students from the artificial pressure to produce, and at the same time is supportive of students who are interested and motivated enough to initiate their own Type III (independent) project.

QUINCY

Elementary Laboratory Center (ELC) **Started:** 1957

Atherton Hough
Francis W. Parker
Lincoln-Hancock
Montclair
Squantum
Daniel Webster
Furnace Brook
Merrymount
Snug Harbor

Contact: Diane E. Willard, Montclair School
8 Belmont Street, North Quincy, MA 02171
(617) 786-8708
Grade served: 5, 72 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, homogeneous
Model(s): Renzulli's Enrichment Triad, teaching/learning contracts

Time: 1 day/week, 40 weeks/year
Staff: 1 full-time; 1 computer education specialist; guest speakers, mentors
Funding: local, block grant

ELC is designed to broaden and deepen each student's knowledge base by developing creative thinking, critical reasoning, and problem-solving skills. Logic is explored through the use of the Apple II microcomputer. Language arts offerings include poetry and short story writing, interpretation of literature, and an analysis of the techniques of argumentation and persuasion. Social studies programs include an analysis of the symbol systems of man, technology and culture, economic systems, culture and communication, social organization, and the application of these concepts within the local community. Simulation games and debates provide the foundation for program activities. Mathematics offerings are probability and geometry. Science programs attempt to develop an attitude of scientific inquiry, by means of individual and small group research in the physical and life sciences, and through participation in the statewide **Future Problem Solving Bowl.** Participants in ELC are selected by a screening committee comprised of the director of pupil personnel services, elementary school principal, ELC teacher, and a classroom teacher. Teacher recommendations, and a combined score of 215+ on a standard intelligence test and a standard achievement test are two of the criteria used in the selection process.

Advanced Placement Center **Started:** 1957

Atlantic Middle
Central Middle
Reay E. Sterling Middle
Broad Meadows Middle
Quincy Point Middle

Contact: Louis DiMartinis, Central Middle School
1012 Hancock Street, Quincy, MA 02169
(617) 786-8725
Grades served: 6-8, 175 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, homogeneous, independent study, team teaching
Model(s): Renzulli's Enrichment Triad
Time: 5 days/week, 40 weeks/year
Staff: 3 full-time; 9 part-time; 1 part-time computer education specialist
Funding: local, block grant

This self-contained program is designed to meet and challenge the academic needs of students by providing enriched and accelerated learning experiences. Students work with teams of teachers in instruction areas. Educational experiences in the allied arts and in computer instruction are provided.

RICHMOND

Program for Academic and Creative Expression (PACE) **Started:** 1984
Richmond Consolidated School, Rte. 41

Contact: Bonnie Jean Cousineau
Swamp Road, Richmond, MA 01254
(413) 698-2779
Grades served: 4-8, 20 students
Curriculum: science, mathematics, language arts, logic, decision making
Type: during school, after school, heterogeneous
Model(s): Renzulli's Enrichment Triad
Time: 1½ hours/week during school; after-school time varies, averaging 3 hours/week
Staff: 1 full-time; mentors; parent advisory group
Funding: local

PACE, designed and directed by teachers, has been enthusiastically endorsed by the community. Program emphasis is on developing logical and creative ways of solving problems. Activities include brainstorming, forecasting, solving matrix problems, and using syllogisms and analogies. Group projects are encouraged, and considerable time is devoted to creative writing and drama. Evaluation is anecdotal. Program participants are selected on the basis of scores in five areas: CAT, IQ, writing sample, Renzulli checklist, and a test of logic and creativity composed by the PACE director. A program brochure is available through the contact person noted above.

ROCKLAND

Super Saturdays **Started:** 1980
Massasoit College, Brockton
Rockland Public Schools

Contact: Robert J. Doyle, Rockland Public Schools
394 Union Street, Rockland, MA 02370
(617) 878-1380
Grades served: 4-8
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment: after school
Staff: faculty at Massasoit College
Funding: tuition, $35/course
Note: call for application form & deadline

Saturday courses are available upon the recommendation of the Child Study Team at the attending school. Workshops that have been offered in the past include: Theater Games, Solar Energy, Children's Literature, New England Marine Life, Computer Science Concepts, Creative Writing, Learning Word Processing, Welcome to Psychology, and Fun with Mathematics.

SALEM

Talented and Gifted Program **Started:** 1983
Salem Middle School West St. Joseph's School
Salem Middle School East

Contact: Barbara Nachmias-Kedesdy
29 Highland Avenue, Salem, MA 01970
(617) 745-9300, ext. 216
Grades served: 6-8, 28 students
Curriculum: science, mathematics, language arts, social studies, art
Type: enrichment: during school, independent study
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 0.8 part-time; mentors
Funding: local, block grant

Salem's program emphasizes critical thinking and problem solving, writing and fluency, mathematical and logical reasoning, decision making, and value formation. The focus is on group discussion, individual and team projects, simulations, and independent research. Special activities include the creation of a time capsule, an invention fair, a mentor program (including computers), and a mini-course presented by the Historic Salem Society. Students are selected through a screening process which includes reading and mathematics achievement tests, the SRA Educational Ability Series, the Torrance Test of Creative Thinking, and nominations by teachers and peers.

SHARON

Program for the Academically and Creatively Talented **Started:** 1959
Sharon Junior High

Contact: Clista Dow or Judith Brown
Mountain Street, Sharon, MA 02067
(617) 784-6717
Grades served: 6-8, 70 students
Curriculum: computers, science, mathematics, language arts/reading, social studies, music, art, future problem solving, critical & creative thinking skills

Type: enrichment, acceleration: during school, homogeneous, heterogeneous, independent study, team teaching, resource room
Model(s): locally developed
Time: approximately 15 hours/week, grade 6; others, varies from 1-20 hours/week
Staff: 1 full-time; 1 part-time; 10 mentors; various cultural institutions
Funding: local, block grant

Flexible scheduling within a team-teaching design allows 6th graders to interact with both intellectual and chronological peers on a regular basis. Seventh and 8th graders participate in activities of individual interests, e.g., computers, future problem solving, **Great Books** discussion program, and various academic competitions. A major goal of all programs is to provide an environment that will allow for divergency and the development of individual potential. The curriculum is differentiated in all areas, including critical and creative thinking skills, independent study, research methodology, creative dramatics, and music.

SOMERSET

Somerset's Program for G/T Learners **Started:** 1983

Chace Street
Pottersville Elementary
South
Village
Wilbur
South Middle
North Middle

Contact: Edward L. Sullivan
Wood Street, Somerset, MA 02726
(617) 674-3508
Grades served: K-8, 425 students in talent pool
Curriculum: creative & critical thinking skills
Type: enrichment: during school, homogeneous, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad (Type I activities), Renzulli's Revolving Door, "Project Exceptionally Ready" (Rhode Island), "Creative Problem-Solving Program," "Challenge Boxes"
Time: grades 3-4, 1½-2 hours/day, 2 days/week; grades 5-8, 40-80 minutes/day, 1-2 days/week; 8-16 weeks/year
Staff: 2 full-time; 8 part-time
Funding: local

Students in Somerset's program learn to: develop self-understanding; think creatively and critically in higher mental processes such as analysis, synthesis, and evaluation; advance their communication skills; and use independent learning skills and self-directedness in planning, and in carrying out individual interest pursuits. To be nominated for the program, students must demonstrate achievement and/or potential ability in a combination of areas: above-average intellectual ability, creativity, and task commitment; they also are screened for their degree of participation. Students may be nominated by teachers, parents, and/or by grade 5-12 students. All students in grades K-2 are assumed to be potentially gifted; all grade levels are expected to be included in Somerset's program by 1985-86.

SOUTHBOROUGH

Project SAGE **Started:** 1978
A.S. Woodward Margaret A. Neary

Contact: Kathleen Wellington
53 Parkerville Road, Southborough, MA 01772
(617) 481-2300
Grades served: 3-8, 65 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, resource room
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy
Time: 1-2 hours/week; 30 weeks/year
Staff: 1 full-time; mentors
Funding: local

Project SAGE helps participants develop abstract, critical, divergent, and evaluative thinking skills. It extends regular learning experiences, enabling students to explore individual interests in greater depth. Attention also is given to creative problem solving, and advanced research skills that help students who are involved in independent study projects.

SOUTHBRIDGE

Project XL **Started:** 1981
Charlton Street Eastford Road
West Street

Contact: Lorna L. Lanza
41 Elm Street, Southbridge, MA 01550
(617) 764-3285

Grades served: 3-5, 50 students
Curriculum: computers, science, mathematics, language arts, social studies, future problem solving, bookbinding
Type: enrichment: during school, pull-out, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Guilford's SOI (somewhat), Treffinger/Parnes' Creative Problem Solving
Time: 2½ hours/day, 2 days/week
Staff: 1 full-time
Funding: local, block grant

Students in **Project XL** meet in small groups to learn research, critical and creative thinking, problem-solving, and communication skills, which are transferable to new learning situations and content areas. The major focus, however, is on individual and small-group investigations of real problems in a chosen area of interest. Students' efforts result in the development of a product that can be shared.

SPENCER

Project Spencer High Ability Resource Program (SHARP)
Lake Street Elementary
Maple Street Elementary
David Prouty Junior High

Started: 1982

Contact: Philip F. Devaux
302 Main Street, Spencer, MA 01562
(617) 885-6331
Grades served: 3-8, 125 students (estimated)
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, after school, homogeneous, independent study
Time: 4 hours/week
Funding: local, block grant

Project SHARP is largely a supplement to the regular Spencer school program. It addresses general intellectual ability, and is broad in the four disciplines: language arts, mathematics, science, and social studies. The program attempts to expand learning (horizontal development), as well as to accelerate advancement (vertical development). The key to the curriculum is the individualized educational plan developed by the staff. Identified pupils remain in their normal class setting; classroom teachers arrange for special lessons and activities uniquely designed to meet the needs of these high ability students.

SPRINGFIELD

Gifted/Talented Program **Started:** 1979
system-wide (see below)

Contact: Kathleen M. Riordan
195 State Street, Springfield, MA 01103
(413) 787-7177
Grades served: 1-12
Curriculum: computers, mathematics, language arts, art
Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous, independent study
Time: varies, depending on program
Staff: 4 full-time; 2 itinerant; mentors
Funding: local, Chapter 636

Art Enrichment

One itinerant art teacher works with identified students in some of Springfield's elementary schools. All grades 1-4 and 5-6 elementary schools offer enrichment and/or gifted/talented programs when resources permit.

Foreign Language and **Music Enrichment**

Armory Street
Margaret C. Ells
Frank H. Freedman
Washington
Elias Brookings
Alfred M. Glickman
Warner
New North Community

Three itinerant foreign language teachers offer French and Spanish to selected 5th and 6th grade students. Classes meet for 20-minute periods, three times a week. Itinerant instrumental music teachers offer instruction on a regular basis.

Math/Computer Magnet Program: Armory Street

Students are tested in grade 4 and high-scoring students are invited to attend Armory as Magnet students. This accelerated program gives students the opportunity to advance beyond the limits of the traditional mathematics curriculum.

Math/Science Magnet Program: Chestnut Street Junior High

This program is a continuation of the Armory program; the students continue an accelerated mathematics program. A senior high program is being developed for these students.

Junior High English Enrichment

Chestnut Street Junior High
Forest Park Junior High
M. Marcus Kiley Junior High
John J. Duggan Junior High
John F. Kennedy Junior High
Van Sickle Junior High

One full-time itinerant English teacher works in the junior high schools on a special reading/writing program. Students are recommended by their teachers and work with the itinerant teacher for one period daily for 5-6 weeks. Themes

have included Ancient Greece, autobiography, and oral history; they vary from school to school and from year to year.

Advanced/Honors Courses: offered to grades 7-9 and 9-12 secondary schools whenever possible.

Springfield School Volunteers' Mentor Program for the Gifted and Talented **Started:** 1979
All schools

Contact: Sharyn M. Holstead, Springfield School Volunteers
195 State Street, Springfield, MA 01103
(413) 787-7015
Grades served: K-12, 150 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, leadership
Type: enrichment: during school, after school, heterogeneous
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: varies, depending on program
Staff: 1 full-time; 45+ mentors
Funding: local, contributions from business

The **Mentor Program** provides supplemental experiences for gifted and talented students in the Springfield schools. It involves matching a person from the community with a student (or a group of students) who has shown exceptional ability and interest in a given area. The mentor and students are involved in a structured project designed to expand the horizons of the students. Students are referred to the program by their principals, teachers, and counselors. Projects vary and may cross academic and artistic disciplines.

STONEHAM

Academically Creative Education (ACE) **Started:** 1983
Central
North
South
Colonial Park
Robin Hood

Contact: Diane Conforti-Foster or Nancy Musserian, Central School
25 William Street, Stoneham, MA 02180
(617) 438-6383 or (617) 438-3820
Grades served: 4-6, 49 students
Curriculum: computers, science, mathematics, language arts, social studies, art, research
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy

Time: 1.5 hours/day, 2 days per week
Staff: 1 full-time; 1 part-time director, 1 director of reading (K-12) & Chapter I
Funding: local

ACE's curriculum encourages participants to develop higher level thinking skills through the study of various problems, involvement in project work, and independent learning. The objectives are to:

* help students achieve higher levels of cognitive development (e.g., critical thinking, research skills, creative thinking, problem solving, self-awareness, and task commitment);
* help students achieve greater levels of affective development;
* provide students with an opportunity for interaction with their intellectual peers;
* provide student access to a wide variety of resources; expose students to an atmosphere of questioning and risk taking;
* promote and nuture personal growth through self-motivation, responsibility, and leadership; and
* promote independent behavior.

The curriculum covers the higher thinking levels of Bloom's Taxonomy (analysis, synthesis, evaluation); creative problem solving (fact finding, problem finding, idea finding, solution finding, acceptance finding); creative thinking (fluency, flexibility, originality, elaboration); and affective skill development. The strategy used to attain these defined curriculum goals is Renzulli's Enrichment Triad Model.

Criteria for selection in the program include: CTBS scores, national percentiles from the short form aptitude tests, total reading, total math, total language, and total battery local percentiles; individual aptitude test, Slosson (where required); overall report card grades and teacher comments; teacher and peer questionnaires; and creativity tests where applicable.

Students are basically grouped according to interest based on Renzulli's Interest Inventory. The program is held in a resource room located at Central School. Time blocks are varied so that participants will not miss the same core subjects in their regular classrooms. An inservice component is incorporated during the year for both parents and teachers of ACE students.

Honor Program **Started:** 1964
Stoneham Junior High Stoneham High

Contact: William P. Murphy
149 Franklin Street, Stoneham, MA 02180
(617) 438-5717
Grades served: 7-12, 180 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, homogeneous, heterogeneous (depending on subject)
Model(s): leveling in individual courses involving enrichment & sometimes acceleration

Time: 0.75 hours/day, 5 days/week, 36 weeks/year
Staff: 16 part-time
Funding: local

The **Honors Program** involves considerable enrichment and acceleration, and is open to students who have demonstrated outstanding capacity for achievement and scholarship. In all cases, the approval of the department chairperson is required.

STURBRIDGE

Sturbridge Individual Potential Program (SIPP) **Started:** 1979
Burgess Elementary

Contact: John Snelgrove
P.O.B. #27, Cedar Street, Sturbridge, MA 01566
(617) 347-7041
Grades served: 3-6, 30 students
Curriculum: computers, science, mathematics, language arts, social studies, art
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 1 full-time; 1 instructional aide
Funding: local

SIPP offers a philosophy and a management system for teaching gifted elementary students. This pull-out program expands cognitive and affective abilities through independent study and support skills lessons. A planned system of product sharing, called two-way enrichment, ensures that program students' completed works are presented and shared with an audience of regular classroom peers. This unique system gives the gifted students' efforts and products double value: the process is enrichment for the gifted, the product becomes enrichment for the classroom and the audience.

SIPP was designed by teachers with an eye towards the program's relationship to and the requirements of the regular classroom. It is tailored to mesh with the regular school day, and features a system of continuous classroom program interchange of information and evaluation. The curriculum permits students to make a gradual entry into the freedom of intellectual exploration, during which they can progress through stages toward truly independent study. This method offers opportunity for the development of a strong self-image, and fosters a regard for high-quality effort.

SUDBURY

Catalyst Program **Started:** 1981
Peter Noyes Elementary Curtis Middle
Josiah Haynes Elementary

Contact: Mildred A. Chandler
472 Concord Road, Sudbury, MA 01776
(617) 443-9971
Grades served: 4-7, 205 students
Curriculum: interdisciplinary
Type: enrichment: during school, homogeneous, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy, Philosophy for Children, Juntune's Productive Thinking
Time: Type I activities, 1 time/month;
Type II activities, 45 minutes/week in resource room & 2 times/month in class;
Type III activities, up to 5 hours/week
Staff: 4 full-time; mentors, assistant to Supt. of Curriculum & Instruction
Funding: local

The **Catalyst Program,** which focuses on Renzulli's Enrichment Triad and Revolving Door models, is held in four resource rooms in three schools. Talent pool students participate in exploratory activities, process skill training, and individual research-based projects. Students are encouraged to explore the many topics presented and use the skills they have learned to do indepth, original investigation in a specific area of interest. All students are urged to attend Type I activities. Additionally, resource room teachers present Type II process skill activities in the regular classroom, on a weekly basis.

SWANSEA

Projects for High Learning Potential **Started:** 1984
Southeastern Massachusetts University (SMU)
Old Westport Road, North Dartmouth, MA 02747
Swansea High School

Contact: Howard A. O'Hare
70 School Street, Swansea, MA 02777
(617) 675-0568
Grades served: 10-11, 10 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art

Type: enrichment: after school, homogeneous, team teaching
Time: 2 hours/week
Staff: SMU professors; H.S. teachers serve as group leaders
Funding: local, state grants, federal grants

For a description, see **SMU** under **"Special Project."**

TEWKSBURY

Guided Nurturance of Multi-Exceptional Students (GNOMES) **Started:** 1980

North Street
Dewing
IGE (grades 5 & 6)

Heath Brook
Shawsheen

Contact: Theresa Ross or Elise Racicot
133 North Street, Tewksbury, MA 01876
(617) 851-7376
Grades served: K-6, 62 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, student-interest areas
Type: enrichment, acceleration: during school, homogeneous, heterogeneous, independent study, team teaching
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 1 hour/week; visits to mentors &/or cultural institutions
Staff: 2 full-time; 2 itinerant; cultural institutions, mentors
Funding: local

Students considered for admission into **GNOMES** are nominated by parents, teachers, specialists, self, or administrators. Students are admitted to this differentiated curricula through a multiple criteria matrix format. This format includes measures of above-average ability, task commitment, and creativity. The matrix designates student participation in mainstreamed classroom enrichment cluster grouping, and/or individual mentor-guided learning experiences. Each learning experience implements a confluent, brain-compatible instructional approach determined from interest, surveys, and learning style inventories. The contracted learning experience is the result of the combined input of students, teachers, parents, mentors, and program facilitators who evaluate the program annually.

UXBRIDGE

Project CAPTURE **Started:** 1979

Whitin Intermediate

Uxbridge High

Contact: Joseph T. Mahoney, Uxbridge Public School
Capron Street, Uxbridge, MA 01569
(617) 278-2706
Grades served: 9-12, 60 students
Curriculum: computers
Type: enrichment: during school, homogeneous, independent study
Time: 1 hour/day, 2 days/week, 40 weeks/year
Staff: 2 part-time
Funding: local

Each year approximately 25 eighth grade students are selected for **Project CAPTURE.** All students participate in a three-week (one period per day) Introduction to Computers unit. At the high school, these students enter a program of supervised independent study, and proceed through a series of carefully prepared exercises, with the goal of becoming a competent computer programmer in BASIC. Written tests and teacher recommendations are the selection criteria.

WAKEFIELD

Above Average Ability (AAA) Program **Started:** N/A

Dolbeare
Franklin
Hurd
Walton
Doyle
Greenwood
Montrose
Atwell

Contact: Kathleen Buckley, Atwell School
485 Main Street, Wakefield, MA 01880
(617) 246-2520
Grades served: 4-6, 80 students
Curriculum: all standard curriculum areas
Type: enrichment: during school
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy, Williams' Cube
Time: 6 hours/week, 1 day/week
Staff: 1 full-time
Funding: local

The **AAA** curriculum is organized with concern for process, content, and product. Goals are oriented toward process and emphasize the development of higher level thinking and reasoning skills such as analysis, synthesis, and evaluation. The content includes study of student interest areas, major ideas and issues, and human relations, as well as enrichment learning in mathematics, science, language, and the arts. Work is carefully evaluated so that creativity and quality are rewarded. Students are taught to consider their audience when planning their final products.

WALPOLE

PACE **Started:** 1982
Fisher Elementary

Contact: Hal LeBlanc
Gould Street, Walpole, MA 02801
(617) 668-5400
Grades served: 3-4, 30 students
Curriculum: mathematics, language arts, social studies, music, art
Type: enrichment: during school, homogeneous, heterogeneous, pull-out, independent study
Model(s): Renzulli's Enrichment Triad
Time: ½ hour/day, 5 days/week (additional time during school for special projects)
Staff: full-time; mentors (parents, school volunteers); staff focus
Funding: local

Selection criteria for participating in **PACE** include CTBS testing, Raven, Williams Scale, and the Renzulli Scale. Through the Wisconsin Design reading skills program, students are placed into two-week groups to receive skills and enrichment training. Curriculum includes **Junior Great Books**, taught by reading specialists, and other units of study designed by individual classroom teachers, such as a poetry unit, Statue of Liberty unit, gravestone rubbing, and art appreciation.

Students also have the opportunity to participate in the **TEC** challenge, a collaborative effort of many communities to provide challenging opportunities and projects for the gifted. Students may join the yearbook or newspaper staffs, piano club, special chorus, or sign up for computer lab. Fourth graders have the opportunity to participate in a yearly musical.

WALTHAM

Internship Program for Gifted High School Students **Started:** 1978
Waltham High School

Contact: Alan Aymes
488 Main Street, Waltham, MA 02254
(617) 893-8050
Grades served: 12, 3-6 students
Curriculum: computers, science, language arts, social studies
Type: enrichment: during school, after school
Time: varies per week
Funding: none required

The **Internship Program** is designed for high achieving, highly motivated seniors who have taken all of the advanced courses the high school offers in their

fields of interest. Students are selected for the program by teachers-administrators committees. Participants are assigned to prominent, professional mentors who can offer students an intensive academic experience. Depending on the specific arrangements, students may be on an internship assignment for an entire semester, a quarter semester, one day, or part time. Students are expected to keep a log and to give a report and/or seminar at the conclusion of their internship experiences.

WARREN

Project Excel **Started:** 1984
Warren Elementary

Contact: Bethany A. Roberts
High Street, Warren, MA 01083
(413) 436-5585
Grades served: 3-6, 13 students
Curriculum: computers, science, mathematics, language arts, social studies, music
Type: enrichment: during school, after school, heterogeneous, independent study
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 2 hours/week
Staff: 1 part-time; mentors
Funding: block grant

Project Excel emphasizes activities based on student interest outside the usual curriculum areas. Large groups see films and hear speakers, while smaller groups participate in demonstrations, workshops, and individual study projects. Small study groups take up most of the time, focusing on a variety of thinking, communication, and research skills.

WEBSTER

Enrichment Reading **Started:** 1980
Webster Public Schools

Contact: G.P. Deary, Webster Public School
Box 430, Webster, MA 01570
(617) 943-0104
Grades served: 4-6
Curriculum: language arts
Type: enrichment
Model(s): teacher recommendation, based on reading groups with self-contained rooms

Time: 1 hour/week
Staff: full-time; itinerant
Funding: local

At the close of each school year, grade 3-5 teachers are asked to recommend students they feel would benefit from an enrichment reading program. The following year, selected students meet with the remedial reading teacher for enrichment sessions. Students find the sessions challenging and enjoyable; no report card mark is given. These sessions also give the remedial reading teacher a different perspective on students.

WESTBOROUGH

Program Enrichment **Started:** 1983
Armstrong Annie E. Fales
Hastings Elementary

Contact: Roger T. Thurston
Phillips Street, Westborough, MA 01581
(617) 366-8552
Grades served: 3-6, approx. 40 students
Curriculum: computers, science, mathematics, language arts
Type: enrichment: during school, homogeneous, independent study
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 2 hours/week
Staff: full-time
Funding: local

The purpose of the program is to provide students with additional activities and challenges above those available in standard grouping patterns. Selected students meet with a special resource teacher 1-2 times per week; individual programs are designed for both independent and small group study. Activities are chosen with student input, and students are free to withdraw from the program at any time, without penalty.

WEST BOYLSTON

Center for Education Enrichment (CEE) **Started:** 1983
Major Edwards Elementary

Contact: Sara Holloway
Crescent Street, West Boylston, MA 01583
(617) 835-3391

Grades served: 1-6, 48 students
Curriculum: science, mathematics, language arts, social studies, thinking skills
Type: enrichment: during school, pull-out, independent study, resource room
Model(s): Renzulli's Triad Modified
Time: grades 1-2, ½ hour/week; grades 3-6 (pull out), 1 day/week
Staff: 1 full-time; 1 part-time
Funding: local

CEE offers a differentiated curriculum aimed at developing learning potential. Emphasis is placed on a combination of skills, miniunits and independent study. All students in grades 1 and 2 are exposed to the program. Students in grades 3-6 are identified and selected to work in smaller groups in a resource room setting.

WEST BRIDGEWATER

Toward Our Potential-Howard Academically Talented (TOP HAT) **Started:** 1983
Howard Intermediate

Contact: William M. Jones
70 Howard Street, West Bridgewater, MA 02379
(617) 583-2797
Grades served: 4-6, 43 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment: during school, resource room
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy
Time: 2½ hours/week
Staff: 1 part-time
Funding: local

Through an interdisciplinary approach, TOP HAT aims to develop the following in students: self-concept, and affective needs as students deal with their talents and their relationships with others; critical thinking skills and creativity, logic, deductive reasoning, and problem solving; creativity in content, process, and product; and self-directed learning in study, inquiry, research, and responsibility.

WEST BROOKFIELD

Academic Enrichment Selective Opportunity Program **Started:** 1983
West Brookfield Elementary

Contact: Frances Slowaski
North Main Street, West Brookfield, MA 01585
(617) 867-8792
Grades served: 4-6, 21 students
Curriculum: computers, science, mathematics, language arts, social studies, art
Type: enrichment: during school, homogeneous, independent study, field experiences
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Guilford's SOI
Time: 1 hour/week
Staff: part-time
Funding: block grant

This program transcends regular academic lessons, offering students a challenging, differentiated curriculum. Students explore topics which, while not necessarily treated in the regular classrooms, are a logical outgrowth of classroom instruction. During these sessions, children are trained on the application of higher level cognitive strategies, and problem finding/solving techniques, in topics of student interest. Specific areas of concentration include independent study, problem solving, planning, and the development of critical and creative thinking skills. Students, through emphasis upon long-term task commitment in inquiry and problem-solving experience, are encouraged to accept the responsibility and the challenge to continuously enlarge upon their unique abilities.

There are three components to the program:

Research: designed to encourage independent study within project guidelines. Each student chooses a topic of interest and researches the topic for 4-6 weeks. The topic presentation includes a written report, oral presentation, and one of the following: a diorama, computer program(s), poster, photo album, puppet show, or interview.

Computer Programming: encourages each student to use the computer center to learn LOGO, BASIC, or word processing using "Bank Street Writer." While 4th graders are involved in programming with LOGO, the 5th graders are using "Bank Street Writer" to print their research reports.

Oral History: encourages each student to learn the history of the West Brookfield community, and to interview individual community members--communicating their personal, as well as community histories.

Expansion of the program into the primary grades is being considered.

WESTFORD

Teaching Advanced Potential (TAP) Program **Started:** 1977
Abbot Middle Norman E. Day

Contact: Margery T. Clark, Abbot Middle School
Depot Street, Westford, MA 01886
(617) 692-2587
Grades served: 6-8, 100 students
Curriculum: science, language arts, social studies, interdisciplinary
Type: enrichment: during school, pull-out, independent study, interdisciplinary
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Bloom's Taxonomy
Time: 2 hours/week; "revolving door" time depends on unit being covered
Staff: 2 full-time
Funding: local

TAP curriculum stresses critical thinking and creative problem-solving skills. One marking period each year is devoted to supervised, independent study. Identified students in grades 6 and 7 meet twice weekly. In addition, teachers provide curriculum enrichment in specific subject areas for students in grades 6-8 with specific aptitudes. Teachers serve as resource people within their buildings. Field trips, guest speakers, and mentorships are arranged as the need arises. Teachers also pursue special projects designated by the K-12 gifted/talented task committee.

WEST NEWBURY

The Horizons Program **Started:** 1982
Central School Dr. John C. Page

Contact: Pamela Franklin
694 Main Street, West Newbury, MA 01985
(617) 363-2672
Grades served: K-6, 325 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment: during school, heterogeneous, resource room
Model(s): Renzulli's Revolving Door
Time: hours vary depending upon the specific enrichment activity
Staff: 1 part-time; 10 mentors
Funding: local

Horizons is the result of a cooperative effort by the school committee, teaching staff, administration, and parent advisory committee to develop a program to meet the needs of gifted and talented students at the elementary level. As part of the development of the program, the teaching staff participated in an 11-week inservice training program on gifted education techniques. In 1984, the program expanded to include a part-time resource teacher.

Horizons' philosophy is based on the premise that each child has an equal right to develop his/her full potential; the faculty is committed to providing an enriched curriculum for all children. The regular classroom teachers provide experiences to foster higher level thinking skills and creativity.

Goals of the program are: to provide an enriched curriculum for all children; to maximize the potential of academically gifted and creatively talented children; to use community resource people to enhance the curriculum; to assist classroom teachers in providing general enrichment; and to aid parents in dealing with the gifted/talented child. **Horizons** is supported by an advisory council composed of interested parents, educators, school committee, and community members.

WEST SPRINGFIELD

DELVE **Started:** 1980

John R. Fausey
Mittineague
William Cowing
Memorial
Tatham

Contact: Barbara Daubitz
160 Park Street, West Springfield, MA 01089
(413) 781-7550
Grades served: 5-6, 43 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, independent study
Model(s): Renzulli's Enrichment Triad, Bloom's Taxonomy
Time: 3½ hours/week
Staff: 1 full-time; itinerant; mentors
Funding: local

DELVE focuses on research and creative skills, with an interdisciplinary approach. Emphasis on community resources enhances studies of poetry, genealogy, archaeology, and early New England gravestones. In 1984, an exhibit of an Egyptian mummy motivated indepth research of hieroglyphics and mummification.

DELVE students also pursue an independent study of a self-selected topic resulting in a presentation of developed products. Five teams of students participate in the Massachusetts **Future Problem Solving Bowl** as an after-school activity.

Future Problem Solving and **Mathcounts** **Started:** 1984
West Springfield Junior High

Contact: Nancy Hansmann
115 Southworth Street, West Springfield, MA 01089
(413) 732-3316
Grades served: 7-8, 6 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, after school, homogeneous, independent study
Time: 2 hours/week, problem solving; 4 hours/week, math
Staff: 1 full-time; mentors
Funding: local

The **Future Problem Solving*** program is comprised of four groups at the elementary level, and one at the junior high school. Its purpose is to develop problem-solving techniques, thinking skills, and teamwork.

Mathcounts** is an accelerated program of competitions for junior high school students, which was designed to produce high-level mathematics achievement.

WEST TISBURY

Project Lift **Started:** 1982
Martha's Vineyard
West Tisbury Elementary

Contact: Nan Doty
P.O. Box 246, Chilmark, MA 02535
(617) 645-3393
Grades served: 3-5, 75 students
Curriculum: science, social studies
Type: enrichment, acceleration: during school, heterogeneous, independent study
Time: 3 hours/week, 34 weeks/year

* Sponsored by Honeywell Corporation, MA/AIP, and a local parent support group.

** Sponsored by the National Society of Professional Engineers, CNA Insurance Group, National Council of Teachers of Mathematics, National Aeronautics and Space Administration, and the Massachusetts Department of Education.

Staff: 9 full-time; 5 community volunteers
Funding: local

Project Lift provides a framework within which teachers can create an enriched learning environment for academically talented children within the regular classroom. Mainstreaming provides high ability children with a consistent approach, while all children benefit from being challenged to think and produce at their highest levels. The unexpected reward of this program has been its effect on children with learning disabilities; they have blossomed and thrived, often learning things they were unable to learn in other ways. Some of these children were discovered to be unrecognized gifted children.

In 1985-86, the program will be expanded to include all grades, K-8. Training opportunities in the techniques and management of integrated thinking and research processes with basic curriculum have been provided to all teachers.

WEYMOUTH

Four Star Reader **Started:** 1983

Academy Avenue
Hunt
Elden H. Johnson
Thomas V. Nash, Jr.
Lawrence W. Pingree
Alice E. Fulton
William Seach
Ralph Talbot
Union Street
Wessagusset

Contact: John P. Hackett
111 Middle Street, Weymouth, MA 02189
(617) 335-1460
Grades served: 2-6, 120 students
Curriculum: language arts
Type: enrichment, acceleration: during school, after school, heterogeneous, independent study
Time: 1 hour/day
Staff: 6 librarians
Funding: local

The **Four Star Reader** program is designed to challenge academically advanced readers by providing them with the opportunity to share stimulating books. School librarians select special books recommended for talented readers, and lead discussion groups.

8th Grade Honor **Started:** 1976

East Junior High
South Junior High

Contact: Robert D. West
111 Middle Street, East Weymouth, MA 02186
(617) 335-1460
Grades served: 8, 128 students

Curriculum: science, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, homogeneous
Model(s): teacher recommendation of qualified students in each of four subject areas, testing data, guidance department, and parental input
Time: 5 days/week; 39 weeks/year; varies 41-164 minutes/day
Staff: 11 full-time
Funding: local

Honors English, history, and science programs are basically enrichment ones; honors math is an accelerated one. Qualified students, recommended for the programs by 7th grade teachers, are placed in programs according to their ability in particular subject areas.

WHITMAN

Academically Talented Class (ATC) **Started:** 1977
Holt School
Louis A. Conley — Frank E. Holt
Park Avenue — Regal Street

Contact: Rosamond Dorrance
Essex Street, Whitman, MA 02382
(617) 447-4442
Grades served: 4-5, 40 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, resource room
Model(s): Renzulli's Enrichment Triad
Time: 1 day/week
Staff: 1 full-time
Funding: local

ATC exposes 4th and 5th graders to activities which emphasize research skills and creativity. The program has its own Parent Advisory Council (PAC), which sponsors fundraising events to provide additional funds for field trips and programs.

WILBRAHAM

Enrichment **Started:** 1980
Wilbraham Junior High

Contact: Jack Pedace
466 Stony Hill Road, Wilbraham, MA 01095
(413) 596-9061

Grades served: 6-8, 150 students
Curriculum: computers, science, mathematics, language arts, social studies, art
Type: enrichment: during school, heterogeneous, team teaching
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/week, 1 day/week
Staff: 1 full-time; 2 part-time
Funding: local

The goals of Wilbraham's program are to provide students, who have high intellect, high interest, creativity, and/or leadership potential, with independent study opportunities to expand their knowledge base. Opportunities are provided for students to demonstrate their unique potential, task commitment and creative/productive thinking; also, students develop self-evaluation skills that further self-awareness and foster sound emotional growth.

WILLIAMSTOWN

Williamstown's Academically Talented Challenge (WATCH) **Started:** 1981
Grant Mitchell
Southworth

Contact: Carmella Dodge
Mitchell School, Williamstown, MA 01267
(413) 458-5707
Grades served: K-6, 55 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous, independent study, team teaching, resource room
Model(s): Bloom's Taxonomy
Time: students work in peer group within classroom with some pull out for extensions in computers, writing or interest-based study
Staff: 1 part-time
Funding: local

Williamstown's plan for educating identified academically talented students can be described as a classroom-based model with resource room options. Students are placed in a regular classroom with a small group of academic peers. Identified students have an educational program guide that addresses academic strengths and suggests areas of enrichment, extension, or acceleration. The guide is developed by the classroom teacher, who then implements the objectives. In addition to classroom activities, teachers may elect to have students participate in extended activities outside the classroom, when appropriate.

Extended activity options are: a resource room teacher visits the classroom to work on special projects with small groups or the entire class; students leave the classroom for scheduled activities; or individual students become involved in independent study and/or mentorship programs.

WILMINGTON

Project Enterprise **Started:** 1978

Wildwood
Shawsheen Elementary
West Intermediate
Woburn Street
North Intermediate

Contact: Jerry Connelly or Dough Anderson
67 Dinsmore Street, Lowell, MA 01852
(617) 658-6540
Grades served: 4-8, 132 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art
Type: enrichment, acceleration: during school, heterogeneous, independent study, team teaching
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 3 hours/week; 2 days/week; 35 weeks/year
Staff: 2 full-time; volunteers and representatives
Funding: local

Project Enterprise is an integral part of the Wilmington Public Schools' curriculum. The program is comprised of a variety of topics based, primarily, upon logic, problem solving and investigative techniques. Elementary and intermediate school students meet with teachers in a classroom or library at least two periods a week.

WINCHESTER

Contact: David B. Ackerman
154 Horn Pond Brook Road, Winchester, MA 01890
(617) 721-7006

Advanced Curriculum Provisions within Regular Program **Started:** 1981

Ambrose Elementary
Lynch Elementary
Vinson-Owen Elementary
Lincoln Elementary
Muraco Elementary
McCall Junior High

Grades served: K-8, 25 students (estimated)
Curriculum: computers, science, mathematics, language arts

Type: enrichment: during school, independent study, team teaching, multilevel assignments
Model(s): Renzulli's Revolving Door
Time: varies
Staff: 74 full-time; 11 part-time; mentors
Funding: local, Title IV-C adoption Grant

This is not a separate program for academically talented and creative students; it is a systematic effort to build strong, suitable provisions into the regular school program. While the full impact of these changes has not been measured, it is clear the curriculum's center of gravity has moved in the direction of greater challenge, while maintaining a commitment to appropriate education for all students.

Current provisions include the following: above grade level reading, grades K-6; advanced math objectives in three grades; a high-level math enrichment text in grade 6; interweaving of high-level thinking questions in a new science reading program; a challenging American history text in grade 5; and the adoption of Newton Advanced Challenge Geography for grades 4-6. At the junior high level, provisions include a two-year, four-component continuous progress English program, and the use of the Earth Science Curriculum Project labs with talented 8th graders.

Individualized Advanced Projects with Mentors **Started:** 1981

Ambrose Elementary
Lincoln Elementary
Lynch Elementary
Muraco Elementary
Unison-Owen
McCall Junior High

Grades served: 5-8, 20 students (estimated)
Curriculum: any curriculum area
Type: enrichment: during school, after school, independent study, Saturday
Model(s): Renzulli's Revolving Door
Time: varies
Staff: 7 full-time; mentors
Funding: local

The intermediate/junior high program is designed to support talented, well-motivated students who wish to pursue projects in areas beyond the normal school curriculum. Although the program is potentially open to any student, students demonstrating high academic aptitude are especially encouraged to participate. Projects may be in one or more disciplines, including the arts. The school librarian and/or library aide help students to develop project ideas, provide ongoing support and encouragement, and arrange meetings between students and volunteer mentors. Once a project is approved, a mentor-alert is mailed to a community-based mentor recruiters group, whose members try to find a mentor with relevant expertise and time to share with the student. The student, librarian, and mentor decide, together, in what manner and/or with which media the project can most effectively be shared with others.

WINTHROP

Action Lab **Started:** 1979
N. Elliot Willis Arthur W. Dalrymple
Winthrop Junior High

Contact: Robert Cuddi
Hermon Street, Winthrop, MA 02152
(617) 846-5500
Grades served: 4-7, 40 students
Curriculum: computers, science, mathematics, language arts
Type: enrichment: during school, heterogeneous
Time: 1 day/week
Staff: 1 full-time
Funding: local

Action Lab is for children whose intellects need to be nutured beyond the regular classoom. The main thrust of the program is to challenge the children to think abstractly, and to help them develop practical skills in interest areas. In this child-centered progam, topics for study grow out of specific interest areas expressed by the children themselves. Some past and present programs include photography, computer programming, sign language, weather, and astronomy.

WOBURN

Laboratory Class **Started:** 1965
George I Clapp Goodyear
Daniel P. Hurld Linscott-Rumford
Clyde Reeves Shamrock
Malcolm White Wyman
Mary D. Altavesta

Contact: Lawrence R. Byron, Joyce Jr. High
Locust Street, Woburn, MA 01801
(617) 935-7297
Grades served: 5-6, 170 students
Curriculum: computers, science, mathematics, language arts, music, art
Type: enrichment: during school, homogeneous, independent study
Time: 1 day/week
Staff: 2 full-time
Funding: local

Laboratory Class participants are selected to participate in one of two classes maintained by the program, based on their school's location. Activities focus on exploratory experiences, independent study, and enrichment.

WORCESTER

PEAK Program **Started:** 1978
All 40 elementary schools

Contact: Jacqueline L. Finn
20 Irving Street, Worcester, MA 01609
(617) 799-3516

Grades served: 4-6, 500+ students

Curriculum: computers, science, mathematics, language arts, social studies, art, theater arts, engineering, leadership

Type: enrichment, acceleration: during school, heterogeneous, pull-out, independent study

Model(s): combination of Triad-curriculum philosophy of Hilda Taba, Sandra Kaplan, NS/LTI

Time: 1 day/week; 16 weeks/year (some participate 32 weeks/year)

Staff: 7 full-time; 3 artists-in-residence; 1 engineer; mentors; many cultural institutions

Funding: local, for staff & transportation; parents & private, for other program expenses

PEAK identifies academically and creatively gifted students in all the elementary schools, including bilingual and special needs classes. Many classes are interdisciplinary and cross-graded. Classes take place in school and in cultural institutions where curriculum planning and instruction are shared by teachers, scientists, museum educators, curators, and professional craftsmen and women.

Over 70 half-year modules are offered in math and science, the humanities, and fine arts. Professionals are hired part time to teach theater arts, writing, and engineering. Representatives from the public schools, local colleges and universities, and parents serve on a PEAK advisory board, which seeks resources and support for the program from within the community. Program funds are contributed by parents, the community, and private sources.

ATHOL-ROYALSTON

Academically Talented/Gifted Program **Started:** 1982

Pleasant St.
Sanders Streeet
South Royalston
Athol High
Riverbend
Silver Lake
Athol Jr. High

Contact: Carol A. Ambrozy
314 Sanders Street, Athol, MA 01331
(617) 249-3806

Grades served: 3-12, 229 students

Curriculum: computers, science, mathematics, art

Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous, pull-out, independent study, vacation & summer programs

Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Omnibus; EXCEL & SOAR programs

Time: varies

Staff: full-time; mentors (community resource people); cultural, Guild Players (JH & HS)

Funding: block grant, Commonwealth Inservice Grant

Athol-Royalston offers two programs to students. One, enrichment in nature, and built on Renzulli's Revolving Door Model, is aimed at the top 20 percent of academically talented classes in grades 3-12. Students participate in various programs during and after school, during scheduled vacation weeks, and in a two-week summer program located at Athol High School.

The **OMNIBUS Model**, built on the Renzulli Enrichment Triad Model, is aimed at the top 1 to 2 percent of high school students. Participating students and their parents, the principal, coordinator, and director of the program, develop 4-year Individual Student Plans, which consists of enrichment, acceleration, compacting, exploratory activities, community resources, research, and vocation exposures. This model has been adapted for grades 7 and 8 at the junior high school into a program called **Project EXCEL**. Adaptation for grades 3-6, **Project SOAR**, was scheduled to be implemented during Spring 1985.

The school continues to offer students special programs one morning during the school vacation weeks; a two-week summer program offers theater/drama, computers, math/science, and music. Students who participate in regular school year programs are eligible for these extra programs. During the one-morning vacation programs, a concurrent session is held for staff, parents, and administrators to review the programs and assist in program development.

An Academically Talented Advisory Council (ATAC) meets weekly throughout the school year. ATAC is comprised of the program director/writer, and one administrative, parent, and teacher representative. The council keeps the program alive and moving, assists at all program levels, and formulates recommendations for the school superintendent. ATAC also reviews programs and budget with the superintendent, and administrators from each grade level.

BERLIN-BOYLSTON

Interdisciplinary Progam in Humanities **Started:** 1980
Tahanto Regional High School

Contact: Vincent Keane
Route 70, Boylston, MA 01505
(617) 869-2333
Grades served: 7, 75 students
Curriculum: language arts, social studies, art
Type: interdisciplinary
Time: 4 weeks/year
Staff: 3 full-time; speakers; various cultural institutions
Funding: local

Berlin-Boylston's program revolves around three humanities units:
Values of our Parents: a teaching kit, based on the period between World War I and World War II. the unit follows the conflicts of young people portrayed in the following books: All Quiet on the Western Front, Summer of My German Soldier, and Farewell to Manzanar. This unit has been concluded with a presentation by Betty Greene, author of Summer of My German Soldier.
Prejudice, Poverty and Promise--the City: a student/teacher-developed unit based on local census material (Worcester, Massachusetts), the musical "West Side Story," and the novel No Promises in the Wind.
Bermuda Triangle: conceived after a student viewed a "Nova" program by the same title, stresses critical reading, creative writing, and teaches students to test hypotheses.

DUDLEY-CHARLTON

Project Expand **Started:** 1978
Dudley Elementary Dudley Intermediate
Charlton Intermediate

Contact: George F. Stowe
P.O. Box 97, Dudley, MA 01570
(617) 943-6888
Grades served: 4-6, 33 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, independent study
Model(s): Renzulli's Enrichment Triad
Time: 1.75 hours/day; 2 days/week
Staff: 2 itinerant
Funding: local

Project Expand has a semi-separation design that allows students to interact with their intellectual peers, without being isolated from their age peers and regular curriculum work.

The program emphasizes creative expression, identification, decision making, and challenging experiences which lead to the use of increasingly higher mental processes. Students are stimulated and encouraged to develop thinking processes, and a methodology of investigation, as opposed to mastering content.

FRONTIER

Gateways **Started:** 1978
Frontier Regional

Contact: Frank Heston
North Main Street, South Deerfield, MA 01373
(413) 665-2118
Grades served: 7-12, 25 students
Curriculum: Pioneer Valley studies, poetry
Type: enrichment: during school, after school
Model(s): Renzulli's Revolving Door
Time: 1 hour/day; 4 days/week
Staff: part-time
Funding: local, Carnegie Grant

Gateway is open to all students who receive two teacher recommendations and who are willing to accomplish extensive work independently. This year, project areas were in poetry, music, photography, computer programmming, short story, art work, contour maps, farming techniques, and fly-tying. Outside of lectures and field trips, more and more projects revolve around Pioneer Valley studies, such as Connecticut River Valley geology, history, Indian archaeology, authors, wildlife, and ecology. Certificates are given for outside reading. Numerous field trip offerings are available, at student expense: Salem, Gloucester Whale Watch, Higgins Armory Museum, local geology, courthouse, local newspaper, Springfield museums, local industries, Deerfield Cemetery, Boston, New York, and Quebec.

GATEWAY

Elementary Gifted-Talented Program **Started:** 1982
Blanchard Elementary
Murrayfield Elementary
Russell H. Conwell
Chester Elementary
Russell Elementary

Contact: Stephen J. Lobban
Highland Avenue, Russell, MA 01071
(413) 862-4427
Grades served: K-4, 58 students
Curriculum: multidisciplinary
Type: enrichment: during school, resource room

Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door; also classroom use of Talented Unlimited
Time: 1-2 hours/week
Staff: 1 full-time; 1 part-time; 6-12 mentors
Funding: local, Chapter 636, Commonwealth Inservice Grant

The program goal is to provide students enriched learning experiences. The Talents Unlimited component, for all students in grades K-4, is based on the premise that all students have at least one talent. Prescribed learning activities in productive thinking, communication, forecasting, planning, and decision making provide students with an opportunity to demonstrate their strengths. Each of these talents are, by design, integrated into the basic academic curriculum. This program has succeeded in enhancing student creativity and improving student academic achievement and self-image.

The Revolving Door Identification Model, a pull-out program, focuses on students in grades 2-4, with a small number of kindergarteners and first graders also being served. Up to 20 percent of the school's population participates in regularly scheduled enrichment activities. Students are referred to the program by their teachers; they are selected to participate based on above-average ability, creativity, and task commitment.

GROTON-DUNSTABLE

TAG and Critical & Creative Thinking **Started:** 1984
Swallow/Union — Florence Roche
Tarbell Elementary — Col. W. Prescott Middle

Contact: Rosemary Hefele, Groton-Dunstable Elementary
Main Street, Groton, MA 01450
(617) 448-5505
Grades served: K-6
Curriculum: computers
Type: enrichment, acceleration: homogeneous, heterogeneous, independent study, team teaching, critical thinking, process writing
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door; adapted Type II for all
Time: varies according to need
Staff: full-time; 1 part-time; mentors
Funding: block grant, Commonwealth Inservice Grant

TAG offers enrichment activities to all elementary school students. Groton-Dunstable staff is, at present, working with UMass's Department of Critical and Creative Thinking in developing staff training so that all elementary school teachers will be able to define, and therefore incorporate into the curriculum, critical thinking skills at their respective grade levels.

MENDON-UPTON

Project Jetstream **Started:** 1984
Memorial Elementary Henry P. Clough
Miscoe Hill Middle

Contact: Cynthia Robertson, Miscoe Hill Middle
Mendon, MA 01756
(617) 478-2240
Grades served: 4-7, 50 students
Curriculum: computers, mathematics, language arts
Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 1½ hours/week
Staff: full-time; 1 itinerant
Funding: collaborative grant through Mass. Board of Regents of Higher Education

Project Jetstream focuses on teaching critical thinking skills and problem solving processes.

NASHOBA

Honor and AP Courses **Started:** N/A
Nashoba Regional High School

Contact: Bill Bingham
Green Road, Bolton, MA 01740
(617) 779-2257
Grades served: 11-12, 25 students
Curriculum: science, mathematics, language arts, social studies
Type: enrichment, acceleration: during school, heterogeneous
Time: 1 hour/day; 5 days/week
Staff: part-time

A series of six honors or advanced placement courses are offered to high school students meeting certain basic academic requirements. Course offerings are: U.S. history; a history of Western thought; a survey of American literature, with emphasis on the novel, short story, drama, and poetry; and philosophy of Western literature, which covers a wide range of fiction and nonfiction dealing with the development of Western thought. Students with a strong interest in science and a willingness to assume greater academic responsibility are offered chemistry AP or calculus AP.

NAUSET

Academically Advanced and Talented Students (AAATS) **Started:** 1978
Nauset Middle School

Contact: John Stewart
RR1, Box 402, Orleans, MA 02653
(617) 255-0016
Grades served: 5-8, 75-100 students
Curriculum: computers, science, mathematics, language arts, social studies, art, problem solving, outward bound law
Type: enrichment, acceleration: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door, Guilford's SOI, Stewart's Duodecahedron
Time: 1-15 hours/week; 38 weeks/year
Staff: 1 full-time; 6-20 mentors
Funding: local, Commonwealth Inservice Grant, PTO/parents

AAATS, essentially an enrichment program, has a bit of built-in acceleration. Students take part each year through a revolving-door entry system, based on student ability and interest. When possible, extensive use is made of mentors and community resources. Activities are basically academic (with advanced courses in reading, writing, mathematics, computer programming, and languages), but there is also a strong "reality" component in which students work to solve local problems.

Examples of past student problem solving include solving the riddle of the ringless Bay scallop; producing TV programs on home energy alternatives and first aid; making a film on the local effects of acid rain; and working with local police, court officers, lawyers, and psychologists to produce a mock trial revolving around the issue of insanity. During 1984-85, a legal studies course, being run through the local district court, will culminate in a mock trial. Students have also taken part in the **Future Problem Solving Bowl** (State Champions the past two years) and the **New England Math League.**

NORTH MIDDLESEX

Academic Enrichment Program **Started:** 1979
Fitzpatrick
Varnum Brook
Ashby Elementary
Spaulding Memorial
Hawthorne Brook
North Middlesex Regiona H.S.

Contact: Joyce Smith, Fitzpatrick School
Main Street, E. Pepperell, MA 01437
(617) 433-2787
Grades served: 2-3, 20 students
Curriculum: computers, science, language arts .

Type: enrichment: during school, homogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad
Time: 2 hours/week; 1 day/week; 30 weeks/year
Staff: 2 full-time
Funding: local, block grant

The enrichment programs all follow the Renzulli Triad at the elementary level; middle schools utilize this same model, with a revolving door approach. A district-developed matrix is used to select children for the programs; groups of children also participate in "whole day" cultural, creative arts activities at Varnum Brook school in Pepperell. During the past 2-3 years, the number of students participating have dramatically increased at the middle schools. This year, block grant funds have been used to develop resource centers, and for staff training, materials, equipment, guest lecturers, teachers, and experts in the field.

OLD ROCHESTER

Project Uplift **Started:** 1981
Old Rochester Regional Jr. High School

Contact: Robert C. Gardner
133 Marion Road, Mattapoisett, MA 02739
(617) 758-4928
Grades served: 7-8, 33 active student projects
Curriculum: computers, science, mathematics, language arts, social studies, art
Type: enrichment, acceleration: during school, after school, homogeneous, heterogeneous, independent study, team teaching
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door; varying with teacher, differing opportunities exist...some compact throughout year...others accelerate, creating a block of available time for a group
Time: varies
Staff: 1 full-time; 15 mentors
Funding: local, Commonwealth Inservice Grant, local benefactor assist

Project Uplift's framework is team structured. Many teachers, involved in regular and special program areas, have helped to implement the project at numerous levels. For detailed information, a brochure is available through the contact person.

PENTUCKET

Gifted and Talented Program **Started:** 1985
Pentucket Junior High Pentucket Senior High

Contact: Frank Ferreira, Pentucket Junior High
Main Street, West Newbury, MA 01985
(617) 363-2957
Grades served: 7-9
Curriculum: computers, science, mathematics, language arts, social studies, interdisciplinary program
Type: enrichment: during school, after school, homogeneous, heterogeneous, independent study, resource room
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: varies
Staff: 1 full-time; mentors
Funding: local

For the past two years, Pentucket has been in the process of developing a program to complement the district's elementary programs. In February, 1985, a new program was instituted with the following elements: a resource room, an interdisciplinary program for students in grades 7-9; specific talent activities on a daily basis for students in grades 7-8; general enrichment for all classes via curriculum resources, community speakers, and cultural institutional involvement; and independent study programs, offered in conjunction with a mentor (school or community based).

PIONEER VALLEY

Talented & Gifted Programs **Started:** N/A
Pioneer Valley Regional School

Contact: J. Lepore or S. Hawrylak
Rte. 10, Northfield, MA 01360
(413) 498-2931
Grades served: 8-12, 14 students
Curriculum: science, language arts, social studies, music, art, archaeology
Type: enrichment: during school, heterogeneous, team teaching
Model(s): Renzulli's Enrichment Triad, Renzulli's Revolving Door
Time: 1 hour/day; 3 days/week
Staff: cultural institutions; mentors
Funding: local

The philosophy behind the creative enrichment program is to group selected students in structured situations that will strengthen or expand their creative specialty, group awareness, leadership, and independence, through diverse activities and field trips. Program participants must have potential or identified high creativity in a field, e.g., science, math, computers, art, or music.

Pioneer's faculty and administration encourage all students to thoughtfully identify and evaluate potential creative specialties in themselves. Accordingly, parents are encouraged to identify their children's potential creative specialties, and encourage them to apply for the program. Admission procedures include individual application, parent questionnaire, second person referral form, and a personal interview with instructors and the steering committee. It is felt that this comprehensive procedure is the most effective process for group selection.

PLYMOUTH-CARVER

Contact: Nick Micozzi
Long Pond Road, Plymouth, MA 02360
(617) 746-8450

Academic Competition Team I (ACT I) **Started:** 1984
Plymouth-Carver Intermediate Plymouth-Carver High

Grades served: 7-12, 25 students
Curriculum: computers, integrated topics
Type: enrichment: after school, heterogeneous, independent study, team teaching
Model(s): Renzulli's Enrichment Triad
Time: 1 hour/week
Staff: volunteers, including the science coordinator
Funding: local

ACT I provides a means by which all students can compete academically, at local, state, national, and international levels. No students are discouraged from participation; however, student recognition is given to those team members who have successfully fulfilled the entry requirements for at least one academic competition. The competition group, supervised by the regional science coordinator, meets once a week; department staff volunteers run individual help sessions after the weekly meeting. Some competitions in which students can compete are: MA/AIP Future Problem Solving Bowl; Pilgrim Science 85 (local science fair); State Regional V Science Fair; State Science Fair; NASA Space shuttle; Westinghouse Talent Search; Duracell; and the Search for Solutions competition.

Participating Regional Interests Meeting Education's Needs (PRIMEN) **Started:** 1981
Plymouth-Carver High School

Grades served: 10-12, 75 students
Curriculum: computers, science, business
Type: enrichment: after school, independent study, team teaching
Model(s): Renzulli's Enrichment Triad

Time: 2-10 hours/week; 18-52 weeks/year
Staff: part-time; 50 mentors
Funding: local, business/industry

Student Needs, Teaching Needs, Adopt-A-School, Faculty and Facility Needs (STAFF) are the five support areas represented by this program. These areas are used to fill a perceived void in today's education--the practical application of principles and skills, learned through instruction and by example, on real problems. The local industry, business, and medical communities have formed a cooperative venture with the schools, in order to provide staff with the needed experiences and expertise to fulfill the enrichment needs of the students.

Students' needs are met by the intern component of the program; they are placed in a participating facility where they receive instruction in specific skills. They also are exposed to prospective careers and employers, and are made aware of potential scholarships. Each student is assigned a supervising mentor in the field; the mentor trains the student in his/her respective field, e.g., respiratory therapy, mechanization, computer programming, or cable T.V. Students report to their supervisors after school and during vacations for periods ranging from 18 weeks to two years.

WACHUSETT

Differentiated Learning Program **Started:** 1981
Chocksett Elementary

Contact: Guido Sabelli
Boutelle Road, Sterling, MA 01565
(617) 422-6600
Grades served: 3-6, 37 students
Curriculum: computers, science, mathematics, language arts, social studies
Type: enrichment: during school, homogeneous, resource room
Model(s): Renzulli's Enrichment Triad
Time: 45 minutes/day, 5 days/week, 40 weeks/year
Staff: 1 full-time
Funding: local

The **Differentiated Learning Program** teaches exceptionally able and motivated students the skills and knowledge necessary to maximize their potential. Within different curriculum areas, students focus on materials and experiences designed to extend and expand their knowledge of the content area; learn methods of inquiry and ways to communicate results; and are given opportunities for the application of content knowledge and inquiry skills.

The school works closely with the Projects Center, Worcester Polytechnic Institute, in an effort to develop and implement curriculum in such areas as: weather and natural disasters, astronomy, computer science, photography, sociology, Latin, geometry, and statistics.

BLUE HILLS

Contact: Frank Longo
100 Randolph Street, Canton, MA 02021
(617) 828-5800

American Studies **Started:** 1983
Blue Hills Regional High

Grades served: 11, 35 students
Curriculum: social studies, English
Type: acceleration
Model(s): Renzulli's Enrichment Triad
Time: 3 hours/day, 4 days/week
Staff: 2 full-time
Funding: local, block grant

American Studies provides students with both historical and literary perspectives of the American culture. Materials covered include excerpts from key documents; first-hand accounts of events from authors of the period, who analyze the past and present problems of the nation; and historians' and other experienced observers' interpretations of human affairs. These studies lead students to a better understanding of major themes and topics in American history.

World Studies **Started:** 1983
Blue Hills Regional High

Grades served: 12, 30 students
Curriculum: social studies, English
Type: acceleration
Model(s): Renzulli's Enrichment Triad
Time: 3 hours/day, 4 days/week
Staff: 2 full-time
Funding: local, block grant

This survey course illustrates the influence of social and geographical factors in the development of world governments, and the interdependence of political, social, and economic factors in history; tribalism, feudalism, and variations of democracy and the "isms" of the 19th century are discussed. Literature, studied in conjunction with the history course, concentrates on the historical and social aspects of major literary works produced by writers who lived during the times about which they wrote. The course promotes an objective analysis of information, and gives students a perspective of the world as a community of diverse nations with common objectives.

Computer Programming **Started:** 1981
Blue Hills Regional High

Contact: George Driscoll
100 Randolph Street, Canton, MA 02021
(617) 828-5800
Grades served: 11-12, 35 students
Curriculum: computers
Type: enrichment, acceleration: during school, after school, independent study
Time: 1½ hours/day, 5 days/week, 20 weeks/year
Staff: 1 full-time
Funding: local, Federal Vocational Education Grant

All 11th and 12th grade students in the electronics program are taught the fundamentals of basic computer programming language. The more motivated and gifted students in the group participate in advanced programming projects.

GREATER LOWELL

Project Edison **Started:** 1984
Greater Lowell Regional Vocational-Technical School

Contact: Jack Hall
Pawtucket Boulevard, Tyngsboro, MA 01879
(617) 454-5411
Grades served: 12, 10 students
Curriculum: mathematics, language arts, vocational education
Type: enrichment: during school
Model(s): Renzulli's Enrichment Triad
Time: 2-5 hours/week
Staff: 2 part-time
Funding: block grant

Project Edison offers students workshops in SAT preparation, and provides them with an opportunity to develop their creativity via both group and independent project offerings.

MINUTE MAN

Prep-Tech/High Technology **Started:** 1979
Minute Man Vocational Technical High School

Contact: James Amara
758 Marrett Road, Lexington, MA 02173
(617) 861-6500

Grades served: 11-12, 32 students
Curriculum: computers, science, mathematics, technical areas
Type: acceleration: during school
Model(s): Renzulli's Enrichment Triad
Time: 5½ hours/day, 5 days/week, 40 weeks/year
Staff: full-time; 2-5 mentors
Funding: local

Prep-Tech centers around a rigorous college preparatory program for academically talented and technically oriented students who plan to matriculate at a competitive technical college or institute upon graduation. The program makes use of the "week about" concept: students devote their entire time and attention to traditional academic subjects one week, and to a selected sequence of technical courses the following week. In special cases, students who demonstrate a high interest and/or talent in electronics, instrumentation, plastic technology, drafting, or computer science, may substitute a four-year concentration for the general technology curriculum.

One interesting facet of this project is the **Industrial Partnership Program.** Through this program, qualified seniors have the option of studying with engineers or scientists in their particular technical fields, through a cooperative placement in a local high-tech industry. Working with practitioners as mentors, students get an increased understanding of the applications of the technical skills they are acquiring. During 1983-84, two seniors completed internships at MIT's Lincoln Labs in Lexington--one in the optics division, the other in the aerospace division; a third student worked for Hewlett Packard in Waltham, in its quality control and testing division. Student placement is just one example of the positive opportunities that result when industry and public education work together.

SOUTHEASTERN MASSACHUSETTS UNIVERSITY

Spotlight Program **Started:** 1980

Contact: Robert L. Piper
North Darmouth, MA 02747
(617) 999-8036
Grades served: 10-11, 110 students
Curriculum: computers, science, mathematics, language arts, social studies, music, art, multidisciplinary
Type: enrichment
Model(s): Renzulli's Enrichment Triad
Time: 2-5 hours/week; 1 day/week; 26 weeks/year
Staff: 2 full-time; 2 part-time (public school teacher); 8 part-time SMU faculty
Funding: local; tuition; SMU resources

The **Spotlight Program** combines the resources of Southeastern Massachusetts University with the needs of area high schools. A primary goal of the program is to expose the gifted and talented to challenging learning experiences, unlike those they have had in the typical high school setting. The program attempts to encourage these emerging adults to identify and actively participate in the larger world of intellectual thought, in a university setting. Each student is helped to develop analytical and conceptual skills; moral issues are posed, and students are helped to define value systems, and shape responsible responses to those issues.

Participating high schools are responsible for recruiting, screening and selecting program participants. Students selected for the program are individuals who have displayed high potential for academic achievement, leadership, community service, or artistic endeavor. This potential may be demonstrated through standardized test results, qualitative assessment by high school teachers, or through artistic activities. Students are sought who are willing to share their ideas, take risks, and who are not afraid to dream impossible dreams.

APPENDIX A

TRENDS IN REPORTED PROGRAMS FOR GIFTED AND TALENTED STUDENTS

One hundred thirty-one school districts in Massachusetts reported programs for gifted and talented students. Seventy-five districts are funded completely locally. Fifty-six districts supplement local funds with Block Grant, Chapter 636, and/or PTO monies.

The reported programs are diverse in scope and emphasis. In some schools, students spend time outside the classroom doing research projects with local businesses and community organizations. In others, teachers and school librarians work together to support students' independent studies and group projects. When parents are involved, they serve in various capacities. In some districts, they help to identify resources, mentors, and liaisons with community agencies; in others, they themselves are mentors, teacher aides, and/or drivers who regularly transport students to museums, libraries, and art institutes.

The most frequently reported grade levels and curriculum areas are shown in Figure A.1 and Figure A.2, respectively. Programs cluster at the intermediate grades. Language arts, science, and mathematics appear to be the more popular curriculum choices. However, these curriculum categories are not mutually exclusive; many programs, particularly at the elementary/intermediate level, are multidisciplinary.

Approximately 90 percent of the school districts rely upon enrichment activities (learning experiences which are intended to extend, supplement, and/or deepen understanding of concepts) to meet the needs of the gifted and talented. The major question school districts face is where the enrichment activities should take place--within the classroom, or in separate programs where students are "pulled out" for some portion of the school day.

A majority of school districts provide enrichment within the regular classroom, employing such models as: learning centers, cluster grouping, and individualized study. Those that report enrichment programs outside of the regular classroom use the following models singly or in combination: itinerant teachers, community resources, mentors, special resource rooms, and a central facility shared by several schools in the district.

Figure A.1

PROGRAM DISTRIBUTION IN MASSACHUSETTS

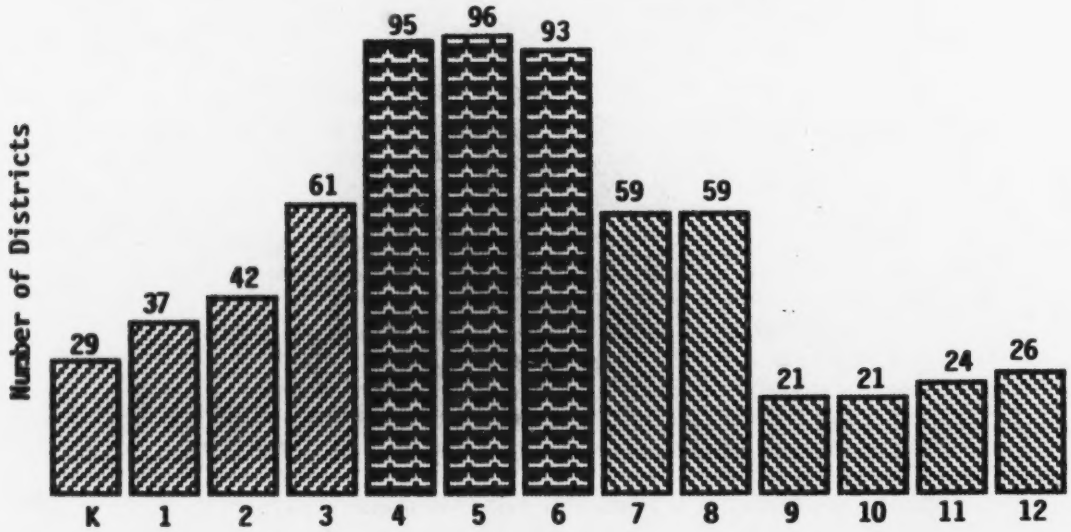
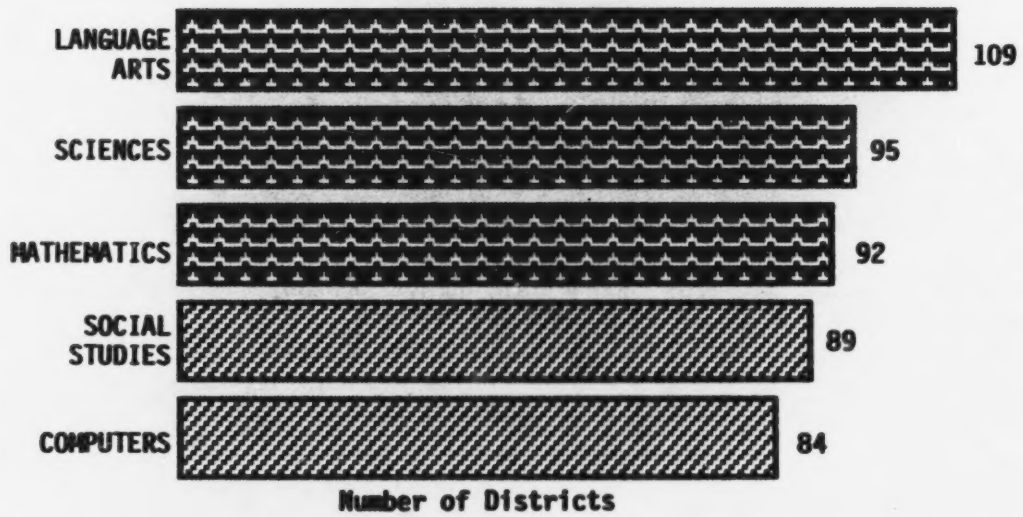


Figure A.2

CURRICULUM AREAS



N.B. Many individual programs include a number of grade levels and are multidisciplinary. Therefore, they are reported in more than one category.

INSERVICE EDUCATION
THROUGH THE COMMONWEALTH INSERVICE INSTITUTE

The Commonwealth Inservice Institute funds a variety of inservice training programs that are:

* participant developed;
* voluntary in nature; and
* designed to meet local needs and to promote federal and state priorities.

The Institute is based on the principle that inservice education is radically different from other types of training. Unlike many graduate courses and workshops, the Institute responds to the specific needs of practitioners, giving them the opportunity to design and direct their own inservice training programs.

The Institute and Gifted & Talented Programs

As part of a statewide effort, the Institute is accepting proposals designed to develop or improve instruction and/or services to gifted and talented children. The Institute funds a wide range of programs in this area. It especially welcomes proposals that address the needs of economically disadvantaged and minority students.

Using the Institute's system of grants, a number of Institute/ Gifted and Talented proposals have been funded. These small grants of up to $3,000 per year have addressed a variety of topics including:

* Designing programs for the gifted and talented at the junior high school level;
* Identifying teaching strategies in science and mathematics to promote learning for gifted bilingual students;
* Counseling the gifted student through the use of role playing, case studies, and group process techniques;
* Determining individual strengths, interests, and learning styles among the gifted and talented;
* Creating a parent-teacher partnership in meeting the needs of gifted students;
* Developing social leadership skills in gifted students at the senior high level;
* Designing curriculum to meet the needs of gifted students in the mainstreamed classroom; and
* Introducing gifted students to research methods and inquiry techniques.

All elementary and secondary school personnel are eligible to apply for Institute/Gifted and Talented grants.

INSTITUTE/GIFTED & TALENTED GRANTS*

September 1984-June 1985

LEA	Title	$ Amt.
Adams Cheshire Regional	Developing Enrichment Program for Mathematically Gifted Students	1,165
Andover	Instructional Strategies within Regular Classrooms	1,535
Bellingham	Intermediate Program for Academically Talented Students	1,477
Bridgewater	Identifying Gifted and Talented Students	897
Brookline	Future Problem-Solving Techniques	2,135
	Integrating Gifted and Talented Math Materials	1,030
Central Berkshire Regional	Providing for Gifted and Talented Students in the Classroom	2,759
Chelmsford	Inservice Training for Gifted and Talented	840
Dracut	Professional Staff Inservice Training for Gifted and Talented	755
Hanover	Restructuring the Hanover Gifted/Talented Program	1,350
Hopkinton	Developing Thinking Skills	1,387
Lakeville	Working with Gifted and Talented Children	835

(continued)

* Funding source of all listed grants: State/Local Aid

LEA	Title	$ Amt.
Newburyport	Developing Critical Thinking and Problem-Solving Skills	2,176
Norton	Teaching Gifted and Talented Children	440
Somerset	Instruction for Gifted and Talented Students	1,942
Southern Berkshire Regional	Training Staff for Gifted and Talented Program	2,776
TOTAL		**$23,499**

* * * For more information, see inside back cover. * * *

APPENDIX C

THE EDUCATION BLOCK GRANT
(Chapter 2 of the Education Consolidation & Improvement Act of 1981)

In June, 1982, federal resources for gifted and talented education were consolidated into the Education Block Grant along with 28 other programs. Schools districts were able to use block grant money for these programs at their discretion. All school districts filed a plan with the Department of Education to show how they would use block grant funds.

The following school districts reported the use of some or all of these monies to serve gifted and talented students. For more information about these programs, please contact the school districts directly.

BLOCK GRANT—GIFTED & TALENTED
Fiscal Year 1985

School District*	$ Amt.
Agawam	23,170
Attleboro	48,619
Athol-Royalston /R	22,292
Arlington	28,620
Brookline	30,573
Canton	13,197
Chicopee	78,439
Danvers	21,296
Fall River	178,529
Falmouth	31,744
Freetown-Lakeville /R	16,093
Gardner	25,489
Greater Lowell /VT	25,752
Groton-Dunstable /R	7,822
Hopkinton	4,905
Lancaster	4,346
Ludlow	15,544
Lunenberg	7,588
Marion	2,740
Mattapoisett	2,405
Maynard	9,375
Medford	35,702
Newburyport	17,764
North Adams	30,237
Northbridge	14,059
North Middlesex /R	18,481
Old Rochester /R	7,002
Pentucket /R	10,743
Pittsfield	85,900
Plymouth	28,563
Quincy	92,439
Raynham	5,907
Salem	42,955
Somerset	16,042
Southwick	10,264
Spencer	9,492
Springfield	499,265
Swampscott	9,011
Taunton	70,858
Uxbridge	10,589
Warren	3,263
West Bridgewater	5,227
West Brookfield	1,401
Westfield	46,036
Westminster	2,650
Westport (private)	14,376

* /R = Academic Regional Schools; /VT = Vocational-Technical Regional Schools

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Local School Systems	Page	GRADE LEVELS: Elementary K	1	2	3	4	5	6	Secondary 7	8	9	10	11	12
Acton	1	X	X	X	X	X	X	X						
Agawam	1	X	X	X	X	X	X	X						
Andover	2					X	X	X	X	X	X			
Arlington	3					X	X	X	X	X				
Ashland	5			X	X	X	X							
Attleboro	6					X	X							
Barnstable	7	X	X	X	X	X	X	X	X	X	X	X	X	X
Bedford	8		X	X	X	X	X							
Beverly	8				X	X	X							
Bolton	9		X	X	X	X	X	X						
Boston	10					X	X	X						
Braintree	10	X	X	X	X	X	X	X	X	X	X	X	X	X
Brewster	13				X	X								
Brockton	14					X	X	X	X	X				
Brookline	15	X	X	X	X	X	X	X	X	X				
Burlington	16					X	X	X	X	X				
Cambridge	16							X	X	X				
Canton	17				X	X	X	X	X	X				
Chelmsford	17					X	X	X	X	X				
Chelsea	18					X	X	X						
Chicopee	19					X	X	X	X	X				
Cohasset	20						X	X						
Concord	20	X	X	X	X	X	X	X	X	X				
Danvers	21					X	X	X						
Dedham	22						X	X						
Easton	22					X	X	X	X	X				
Everett	23					X	X	X	X	X	X	X	X	X
Fall River	24			X	X	X	X	X				X	X	X

Local School Systems	Page	GRADE LEVELS Elementary K	1	2	3	4	5	6	Secondary 7	8	9	10	11	12
Framingham	24		X	X	X	X	X	X						
Franklin	25							X	X	X				
Freetown	26				X	X								
Georgetown	27								X	X				
Grafton	27				X	X	X	X						
Groveland	28	X	X	X	X	X	X	X						
Hanover	29				X	X	X							
Harwich	29	X	X	X	X	X	X	X						
Haverhill	30	(x		x	x	x	x)		X	X	X	X		
Hingham	31	X	X	X	X	X	X	X						
Holliston	31	X	X	X	X	X					X	X	X	X
Lanesborough	32	X	X	X	X	X	X	X						
Lee	33		X	X	X	X								
Leominster	34				X	X	X	X						
Lexington	34								X	X	X	X	X	X
Longmeadow	35		X	X	X	X	X							
Lowell	35		X	X	X	X	X	X						
Lunenberg	36				X	X	X							
Lynn	36					X	X	X						
Lynnfield	37					X	X	X	X	X				
Manchester	38					X	X	X	X	X				
Mansfield	39	X	X	X	X	X	X	X	X	X				
Marion	40	X	X	X	X	X	X	X						
Marshfield	40					X	X	X						
Mashpee	41									X				
Maynard	41		X	X	X	X	X	X	X	X				
Medford	42								X	X	X	X		
Melrose	43	X	X	X	X	X	X	X	X	X	X	X		
Merrimac	44	X	X	X	X	X	X	X						

Local School Systems	Page	GRADE LEVELS												
		Elementary							Secondary					
		K	1	2	3	4	5	6	7	8	9	10	11	12
Milford	45			X	X	X	X	X	X	X	X	X	X	X
Millis	45	X	X	X										
Monson	46				X					X				
Natick	46					X	X							
Needham	47			X	X	X	X	X	X	X				
New Bedford	48					X	X	X						
Newburyport	49		X	X	X	X	X	X	X	X		X	X	
Newton	50	X	X	X	X	X	X	X						
North Adams	51				X	X	X	X	X					
North Attleboro	52							X	X	X				
Northborough	53					X	X	X	X	X				
Northbridge	54				X	X	X	X						
Norton	54												X	X
Palmer	55							X	X	X				
Peabody	56					X	X	X	X	X	X	X	X	X
Pittsfield	58					X	X							
Quincy	58						X	X	X	X				
Richmond	60					X	X	X	X	X				
Rockland	60					X	X	X	X	X				
Salem	61							X	X	X				
Sharon	61							X	X	X				
Somerset	62	X	X	X	X	X	X	X	X	X				
Southborough	63				X	X	X	X	X	X				
Southbridge	63				X	X	X							
Spencer	64				X	X	X	X	X	X				
Springfield	65	X	X	X	X	X	X	X	X	X	X	X	X	X
Stoneham	66					X	X	X	X	X	X	X	X	X
Sturbridge	68				X	X	X	X						
Sudbury	69					X	X	X	X					

Local School Systems	Page	GRADE LEVELS: Elementary K	1	2	3	4	5	6	Secondary 7	8	9	10	11	12
Swansea (@ SMU)	69											X	X	
Tewksbury	70	X	X	X	X	X	X	X						
Uxbridge	70										X	X	X	X
Wakefield	71					X	X	X						
Walpole	72				X	X								
Waltham	72													X
Warren	73				X	X	X	X						
Webster	73					X	X	X						
Westborough	74				X	X	X	X						
West Boylston	74		X	X	X	X	X	X						
West Bridgewater	75					X	X	X						
West Brookfield	76					X	X	X						
Westford	77							X	X	X				
West Newbury	77	X	X	X	X	X	X	X						
West Springfield	78						X	X	X	X				
West Tisbury	79	(x		x	x)		X	X	X	(x	x	x)		
Weymouth	80			X	X	X	X	X		X				
Whitman	81					X	X							
Wilbraham	81							X	X	X				
Williamstown	82	X	X	X	X	X	X	X						
Wilmington	83					X	X	X	X	X				
Winchester	83	X	X	X	X	X	X	X	X	X				
Winthrop	85					X	X	X	X					
Woburn	85						X	X						
Worcester	86					X	X	X						

Academic Regional School Systems	Page	GRADE LEVELS: Elementary K	1	2	3	4	5	6	Secondary 7	8	9	10	11	12
Athol-Royalston	87				X	X	X	X	X	X	X	X	X	X
Berlin-Boylston	88								X					
Dudley-Charlton	88					X	X	X						
Frontier	89								X	X	X	X	X	X
Gateway	89	X	X	X	X	X								
Groton-Dunstable	90	X	X	X	X	X	X	X						
Mendon-Upton	91					X	X	X	X					
Nashoba	91												X	X
Nauset	92						X	X	X	X				
North Middlesex	92	(x	x)		X	X	(x	x	x	x	x	x	x	x x)
Old Rochester	93								X	X				
Pentucket	94								X	X	X			
Pioneer Valley	94									X	X	X	X	X
Plymouth-Carver	95								X	X	X	X	X	X
Wachusett	96				X	X	X	X						

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Blue Hills	97												X	X
Greater Lowell	98													X
Minute Man	98												X	X

Special Project	Page	K	1	2	3	4	5	6	7	8	9	10	11	12
Southeastern Massachusetts University	100											X	X	

For more information about gifted and talented/inservice grants, contact the Commonwealth Inservice Institute representative in the Regional Education Center nearest you.

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